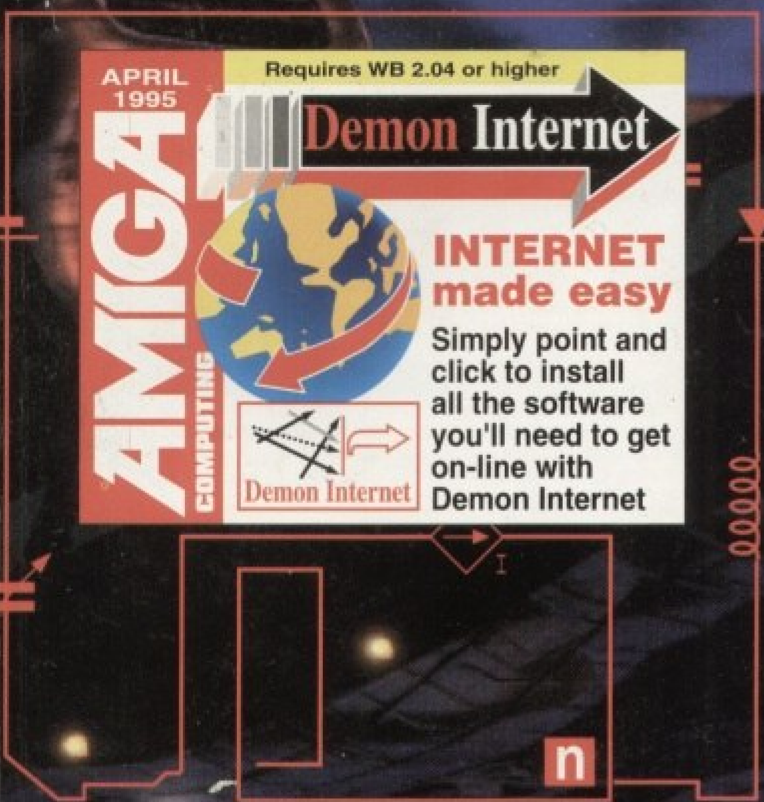
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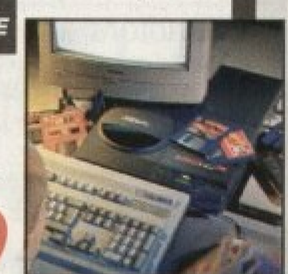
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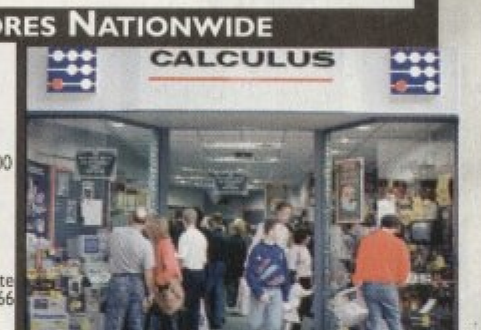
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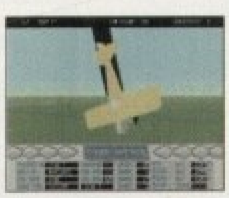
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See page 43

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Page 16



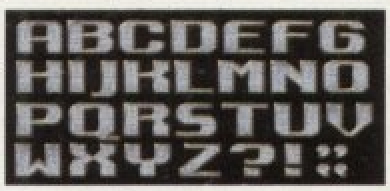
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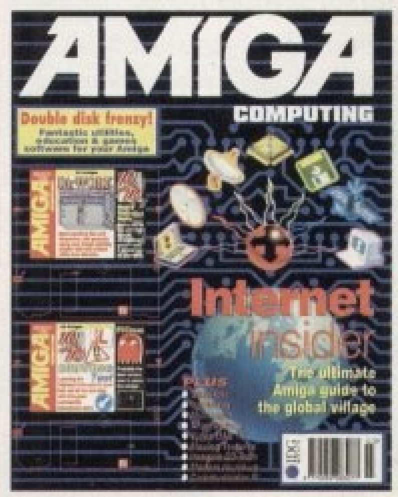
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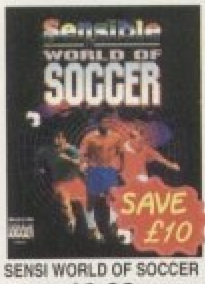


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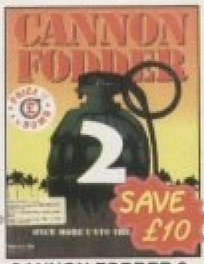
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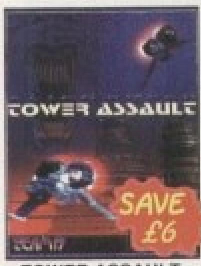
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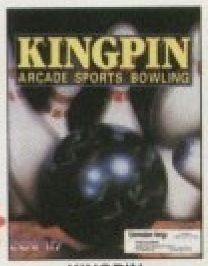
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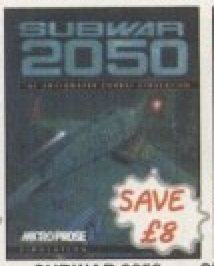
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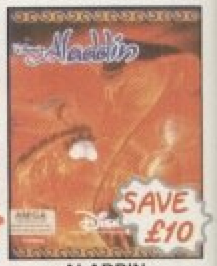
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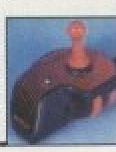

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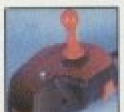

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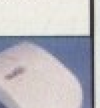

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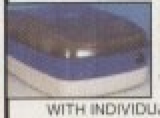

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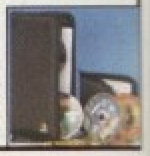

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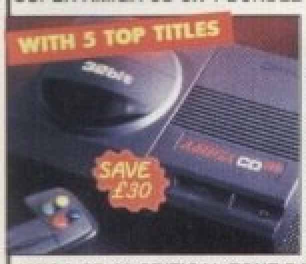
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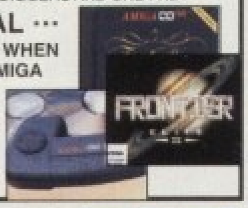
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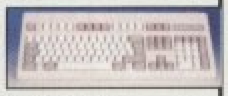
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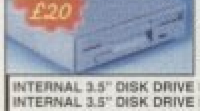
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NEWS

By ADAM PHILLIPS

Caught in the web

Over the last few months, the sale of Commodore has thrown up problem after problem. Now with an end in sight and Amiga International appearing to be in the lead, several revelations have appeared and cast yet another shadow of doubt over the whole affair. According to Dan Stets, a journalist who has been covering the plight of Commodore since its liquidation, the liquidators fear that Medhi Ali and Irving Gould, the former top Commodore executives "may try and block a legal agreement that cleared the way for the company's assets to be sold."

PROBLEMS, PROBLEMS

The first problem that has plagued the management buy-out from day one has been the constant bickering over whose jurisdiction the court proceedings should go through – the US or the Bahamas. After many days round the conference table there has finally been an agreement.

The liquidators are being allowed to use whichever provisions of US or Bahamian law are in the best interest of the estate, as long as the US-based system of bidding is adhered to. And this is what Medhi Ali is rumoured to be unhappy about.

Under these terms, Commodore executives such as Ali and Gould could be held "legally accountable for any actions that they took 12 months prior to the liquidation filing in May 1994." In theory, it would be quite possible for the liquidators to sue both former executives and others if they are found to have had any responsibility in the company's demise or the improper manipulation of its assets 12 months prior to the sale. Further rumour has it that Ali and co. would have preferred the entire dealings to have been dealt with exclusively by the Bahamian courts, where the review of their actions would only date back three months not twelve as is the case now.

Another area in discussion at present is the sum of $2.6 million, supposedly paid out of company assets to renew the company directors' liability insurance for another three years. The policy shields their personal assets from negative legal judgement. The liability insurance was apparently renewed a week before Commodore was liquidated and the chief beneficiaries are rumoured to be Medhi Ali and Irving Gould. The money is seen by some as an asset that has been denied to Commodore stockholders and creditors.

The upshot of this is a potential delay once again to the whole legal proceedings, with Ali and co. giving signals that they intend to oppose the agreement that has taken months to resolve.

David Pleasance isn't so worried though: "I don't know if there is any substance to the Ali affair...but the bottom line is that they will not have the power, nobody will have the power to overrule what the courts rule... I don't think it'll hold the sale up."

Added to this mix of bureaucratic dealings is the sad news that the judge of the case has gone on emergency leave for two weeks after a death in his family. The delays continue.

Tale of four bidders

The battle of the bidders continues this month with the David Pleasance-led management buyout team and CEI, headed by Alex Amor, racing to clinch the deal. As has been the case over the last few months, potential buyers come and go and then pop up again when least expected.

Escom, the German-based company, after originally offering $12 million for Commodore, seemed to have vanished from the picture but rumour has it that the firm is still interested in buying. Another contender has stepped in, apparently representing a major American technology company – the name of which their representative declined to reveal.

The buzz on CompuServe would suggest that CEI are back in the saddle but Pleasance is ever-confident, if a little more cautious than usual: "The liquidator is pushing our investors to sign the contract. He did say to our investors on Tuesday that we are the only players... but you never know, there are so many rumours." At the moment, their main delay is amendments to the 93-page document that lays out the intricate workings of the sale.

In his eyes though, the deal has to go through soon because he knows there has to be fresh stock on the retail shelves by July/August to start the steady lead up to Christmas. "The liquidator has realised that we're rapidly approaching the sell-by-date and if he doesn't get his finger out, we won't achieve our objectives" commented Pleasance.

Indeed, he truly believes that the situation will be resolved very shortly. Judging from the latest developments though, the future is still uncertain.

Telephone fraud: AT&T climb aboard ELSPA's crime cracking unit.

American giants join ELSPA

Amiga Computing reported on the successful raid of the Living Chaos bulletin board in Northumbria in the Christmas issue, which uncovered the fraudulent use of illegal AT&T card numbers. It allowed pirateers to hook up to the States for free, while any financial charges had to be paid for by AT&T.

With this success under their belts, the European Leisure Software Publishers Association's standing in the international software community has been further boosted with the telephone corporation, AT&T, joining the group.

SENTENCING

Details on what has happened to the guilty parties involved in the telephone fraud, which resulted in a discovery of over 50,000 stolen AT&T card numbers, have been made available.

One of the guilty party arrested in the States has already been sentenced. In addition to paying restitution, he was given six months electronic surveillance and will be under probation for three years.

Richard Petillo, manager of corporate security at AT&T, commented on the situation: "The message to hackers must be that the international boundaries which separate people do not separate the law enforcement services operating in each country, and the operation in Northumbria is a perfect example."

Anyone with information on this kind of fraud or knowledge of other illegal software activities can call ELSPA's crime hotline on 01386 833810.



Loader 500: An easy-to-fit replacement drive for peripheral hungry 500 owners

Plentiful peripherals

For those looking to spend a little extra cash on their computer, Silica have two new products to tempt your wallet with. The first, designed by Amitek, is the Loader 500, a replacement drive for the A500 and 500 plus.

It comes with a step-by-step instruction guide that should hopefully help even the most technophobic punter muster up enough courage to open their machine. The unit costs £39 and has a two-year extended warranty.

Silica's other release is the Amitek Mamba, a modulator with a price tag of £34. The external peripheral is simply plugged in and can also connect any Amiga to a video cassette recorder with a direct video input. Graphics and sound can then be recorded to tape using a suitable optional video lead.

For more details on these and other products, drop Silica a line on 0181 309 1111.

Inter...what?

While the computer-holics among us witter on about the Information Highway, RISC-based architecture and cybersex, a survey carried out by Key Note has revealed, perhaps not surprisingly, that the majority of people don't know their keyboards from their SCSI drives.

Just 18 per cent of over 1000 people questioned said they considered themselves to be a competent computer user, while well over a third (37 per cent), said they rarely, if ever use a computer.

The much-vaunted paperless office that was the talk of the specialist press in the eighties is still a long way off, claims the survey producers, with only six per cent of people using electronic mail.

To get your copy of the full results of the UK Computer Market, phone Key Note on 0181 783 0755.

Speed along the net

The new Supra V34 and VFast modems are now available from First Computer Centre. The expected price is £233.83 and the manufacturers claim the modem should equal or out perform any currently available V34s on the market for the price they're asking.

The firm is also releasing a Prima CD-ROM package based on the successful Squirrel interface. For more details, phone Bryan Cobbley on 01132 319444.

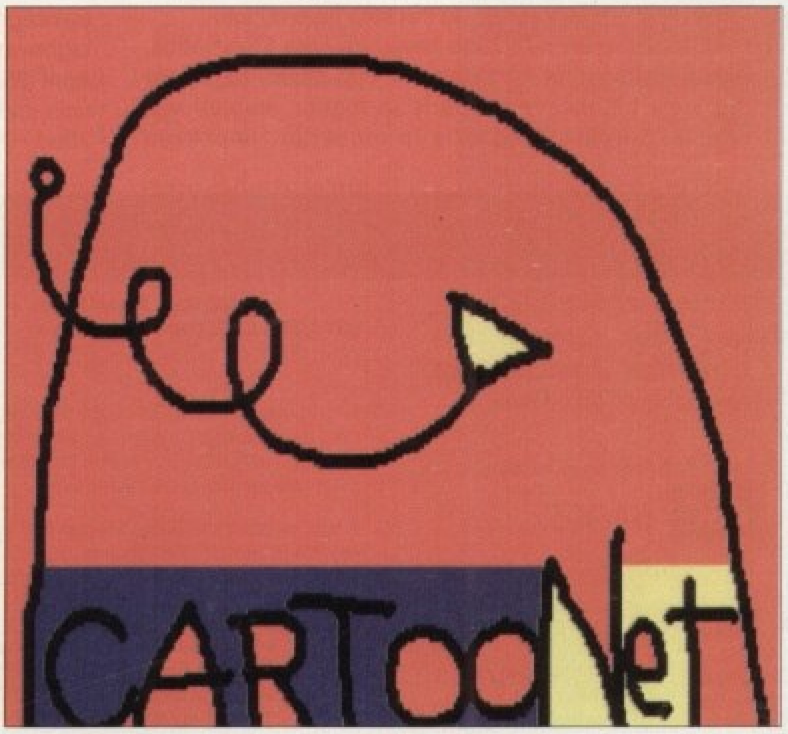
Comic strip presents

Any subject an Internet user can think of will invariably pop up somewhere in cyberspace. Now, with the launch of CartooNet on the World Wide Web, users can access European comics, graphic novels and cartoon strips with the click of a button.

Launched by the European Cartoon Arts Network, the intention is to provide new opportunities for cartoonists and comic strip artists of all types by offering an opportunity to link with fellow creators all over the world.

The other reason for the launch is to readdress a problem that has been on the increase over the last few years. "The European cartoon and comic strip industry has tended to be overshadowed by its American and Japanese counterparts" said John Davies, the managing director of Federated, the company behind the design and development of the idea. "The Cartoon Arts Network aims to raise the profile of European cartoon arts as an equal force in the international market."

To see what the team have come up with, point your Web browser at http://www.pavilion.co.uk/cartoonet/ .



Cartoonet: View European cartoon work on the Internet

NEWS BRIEFS

Music for maestros

As computers slowly take over the world of music with samplers, synthesisers and Amigas, users interested in finding out more about how to use their computer to create masterpieces should pay the Olympia-based Midi, Electronic music and Recording Show a visit during the weekend of 21st-23rd April.

The exhibition is intended to highlight what's 'hip'n'happening' in the music world and also offer computer users the chance to visit 'How To' clinics, see the latest kit and 'try before you buy.'

There are also a series of seminars running throughout the weekend where hardware and software developers can be asked questions, complained at and generally harassed. For more details, phone Kate Bartlett on 01225 444601.

★ ★ ★ ★

Franklin lawsuit dropped

A few months ago, *Amiga Computing* heard that the legal wranglings between Commodore UK and Steve Franklin, its former boss, were on the verge of being dropped. These rumours were denied by Pleasance at the time.

Now though, after two years of misconduct accusations aimed at Franklin and counterclaims made against Commodore UK by the former MD, both parties have decided to call it quits and withdrawn the claims against each other.

★ ★ ★ ★

Council in games shock!

It has been revealed that the offices of Camden Council have been busy designing future cities. Not in reality you understand, but on Simcity 2000 – and instead of going about some of their daily duties in helping the North London borough.

The problem seems to have caused quite an upset among management who have offered an amnesty to those staff indulging in games during office hours.

Staff involved with the downloading of games had to confess by a certain deadline and any guilty individuals who didn't step forward could be certain of disciplinary action.

New data protection guidance

Anyone interested in finding out their rights concerning companies holding information about their personal dealings can contact the Data Protection Registrar who have released a new series of guidelines.

Call the Information Services Department on 01625 535777.

* * * *

Stranahan to strut stuff

Seen by many as Lightwave's guru, Lee Stranahan and his brother Ken, who is apparently a Video Toaster expert, are joining ranks at the seminars being held at Premier Vision in April. While costing in the region of £200 for the day, the 'classes' will be smaller to allow more people to ask as many question as they can in the time.

According to Andy Bishop at Premier, tickets are selling fast, so drop them a line in the very near future on 0171 721 7050.

* * * *

Bargain basement

Alternative Image's powerful titling system Scroller 2 has taken a price dip from £80 to £30. The main reason the Leicester-based company is offering the reduction is the ongoing, unresolved Commodore saga.

To get hold of a copy, call Henri Bujko on 01533 440041.

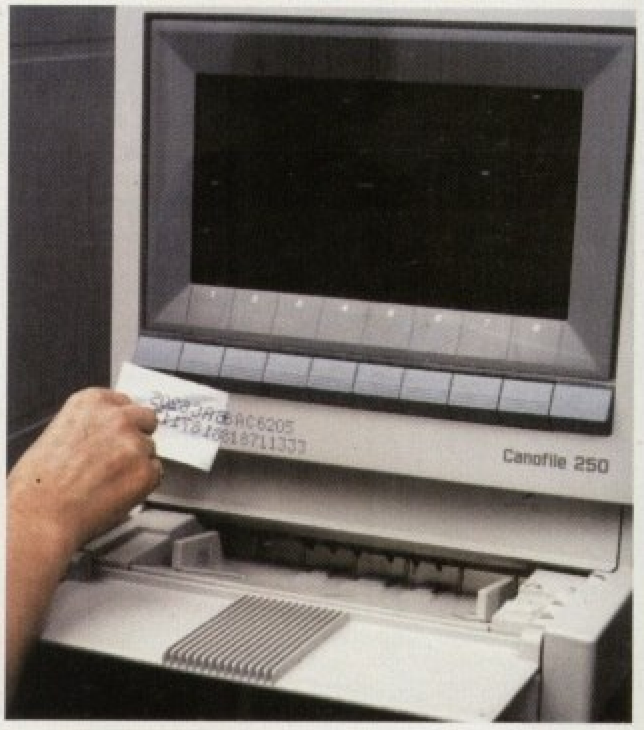
No mess, no loss

Whether you're a home user or part of a company that uses computers, a growing amount of punters are falling victim to hardware theft. Retainaguard have produced a simple system they believe will deter professional and opportunist thieves alike.

Available at various computer dealers and manufacturers, the system is based round a unique and obvious permanent marking. The marking comes in the form of a code number registered with the National Property Security Register and is easily applied to part of the hardware by the use of a stencil and etching fluid.

When a potential customer comes into contact with a piece of marked kit, they can phone the 24-hour checkline to see if the coded equipment is up for sale or is on the list of stolen equipment.

For more details, contact Retainaguard on 0181 870 2224.



Retainaguard: Protect your machine from the threat of thieves and opportunists intent on ruining your day

Lightwave 4: The next generation

It's the package that 3D animators all over the planet have been waiting for with baited breath. Top US shows have been commissioned on the basis that Lightwave can create the all-important special effects within cost-efficient budgets.

Now, the arrival of version 4 is imminent, with Beta versions of the software surfacing in Britain. For those who've held off buying version 3.5 until the release of this, the latest chapter, they have a variety of new options to look forward to.

MORE CHOICE

There are up to four new plug in textures, a glow effect for each object, the ability to load Flyer and PAR clips directly onto any surface, improved shadow mapping lights and adjustable streak density, streak sharpness and streak intensity in the lens flare option.

Other features include basic inverse kinematics, improved support for Picasso 2 that allows the ability to view Lightwave properly in higher resolutions, easier to view XYZ axis in modeller, improved metaform with adjustable maximum smoothing angle and, what could be a blessing for home users, slightly improved rendering times.

Meanwhile, with the imminent launch of Lightwave on the PC and Silicon Graphics, NewTek are doing their utmost to assure Amiga users that they should not worry about the company turning its back on the machine.

"The majority of our user base currently uses Amigas and many prefer it for desktop video and graphics applications," commented NewTek. "However, since Lightwave is quickly becoming a standard for professional 3D graphics users, we felt it was time we provided Lightwave's power to other platforms."

In the meantime Premier Vision, the suppliers of the package, are hoping that the final and completed Lightwave 4 will be available from the beginning of April '95. For more information on this and other products, call Andy Bishop at Premier Vision on 0171 721 7050.

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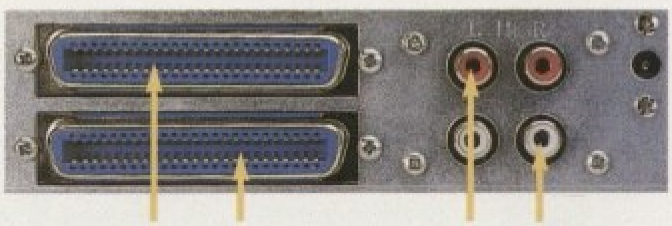


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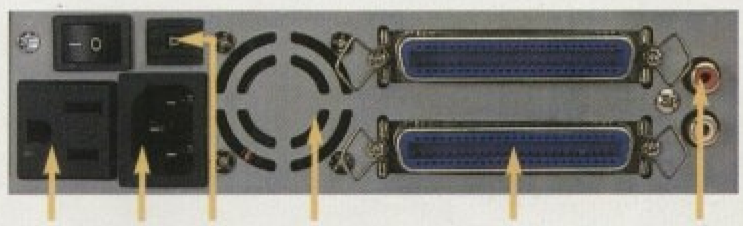


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DOUBLE SPEED CD ROM



QUAD SPEED CD ROM



POWER CD-ROM

The new Power CD-ROM for the Amiga 600/1200 plugs directly into the PCMCIA port and provides a direct SCSI-I and SCSI-II interface, allowing up to six additional peripherals to be connected, for example: Syquest Drives, Hard Drives, Flatbed Scanners and Dat Drives. What's more the Power CD-ROM features a 'Hot-Plug' and 'Un-Plug', which allows you to connect/disconnect at any time the Power CD-ROM and any additional devices, even when your Amiga is switched on.

The CD-ROM comes with a SCSI interface, PSU, manual, audio lead, mains lead* and software: Audio CD, CD32 Emulation, MPEG Film Decoder and PhotoCD software.

COMPARISON CHART

	POWER	OTHER
DOUBLE SPEED, MULTI SESSION	✔	✔
MAX TRANSFER (INTERFACE)	3MB	1.5MB
CD32 EMULATION	✔	✔
NUMBER OF SUPPORTABLE DEVICES	7	1 OR 2
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COST	£199	£199

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GAMESMITH

The Game Development System

Are you tired of those "BASIC" game development systems? Ready for one that you can really sink your teeth into? Fast Parallax scrolling? No problem. Dual Playfields?? A piece of cake! Multiple viewports with multiple animated objects on independent paths with multiply defined background and object collision detection??? Child's play!



Creating fast parallax scrolling landscapes is easy with the Gamesmith system

Professional game development is made easy with the new GameSmith Development System. Over 3 years in the making, GDS gives you the low level power to create the masterpiece of your dreams in a single, comprehensive, easy to use development system.

Build up your animations graphically in the interactive character animator CITAS and then output in C or Assembler source code.

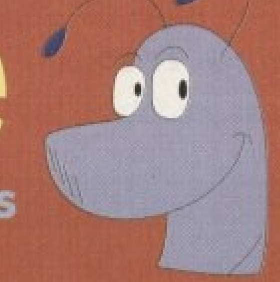
- Customise all aspects of the object, including sequence, placement, speed, display method, priority, & object collision detection parameters.
- Save complex animation sequences out as a single object addressable by the system!
- Optional custom encryption to protect your work.
- Fully supports AGA chipset and mode promotion.
- Hardware level smooth scrolling on a per viewport basis. Fast Parallax scrolling! Independently scroll in dual playfield mode.
- Custom copper lists. Custom hardware sprites.
- Over 350 pages of documentation fully describing the system, utility programs, and over 130 library functions.
- Detailed manual tutorial walks you through the creation of an actual game that exercises all the major components of the system!
- Extra disks full of commented example source code.
- Complete animation system with transparent double buffering and prioritised object display.
- Define custom object-to-object and object-to-background collision detection and response.
- Automatic placement and animation of multi-sequenced animated objects with a single call.
- Chain objects. Animating one object animates them all!
- Automatic virtual space and virtual object handling.
- Dynamic animation control. Modify on the fly!
- Complete audio system to make audio playback easy! Automatic load and play of IFF samples. Interrupt driven background sound replay.
- Easy-to-use, customisable joystick polling routines.
- Very fast and efficient ILBM picture loader.

The GameSmith Development System fully supports and is compatible with all Amigas including AGA. A C Compiler or 680x0 Assembler is required. From shoot 'em ups to graphic adventures, from intergalactic conquest to strategic simulation, the GameSmith Development System is the perfect solution.

Gamesmith now comes complete with Devpac Lite and a reduced version of Dice C so you can start programming straight out of the box.

Don't let the limitations of yesterday keep you from forging the masterpiece of tomorrow!

Termite



Telecommunications for your Amiga

Afraid of becoming a hedgehog on the Information Super Highway? - Don't worry! Termite is so easy to use that even a first time telecommunicator will feel at home. Yet it has all of the power and flexibility to satisfy the most seasoned modem warrior!

Termite is designed to take full advantage of all of the newest features of Workbench 2™ and beyond. It is 100% Amiga Style Guide compliant and provides you with all of the modern user interface features to really enjoy playing in the highway!

- Speeds from 300 to 115,200 bps.
- Flexible phone book with unique configurations for each number.
- Supports Amiga standard XPR libraries allowing you to choose from a wide variety of transfer protocols such as Xmodem, Ymodem, Zmodem, Kermit, and more.
- Supports Amiga standard XEM external terminal emulations in addition to the built in ANSI and VT-102 terminal emulations.
- Configurable review buffer with cut and paste editing between any window.
- The unique script recording function watches your actions and writes complex scripts for you!
- Flexibility! Termite is so completely configurable that everyone can make it their own dream terminal program!
- User configurable floating Button Bar! Assign any program function, macro, or ARexx script to any button. Want your own icons? Just assign any IFF image to the button!
- Automatic call logging. Where you were, for how long, and how much you spent, all saved for you.
- Configurable text macros.
- Support for multiple line BBSs.
- Fully ARexx programmable for complete automation. Assign your scripts to the button bar or install them as a menu option.
- Multi-tasking chat window. Great for those real time conferences.
- Completely font and screen sensitive. You choose the font and screen mode and Termite automatically adjusts everything.





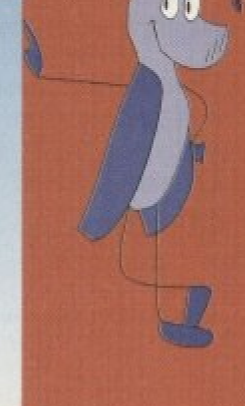
the Termite Button Bar

Termite comes complete with a comprehensive manual explaining the operation of every program function including a quickstart tutorial, ARexx programming examples and a telecommunications glossary. We have also set up the button bar with useful, instant access to CIX and other popular BBSs.

Termite (RRP £39.95 inc) and Gamesmith (RRP £99.95 inc) should be available now from all good Amiga stores. In case of difficulty you can order directly from HiSoft...

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A box of delights

USA news

This month Denny Atkin looks at the release of a new networking standard, and footage and capture cards to keep all keen video producers happy

Amiga Envoy, developed at Commodore as a peer-to-peer networking standard for all Amigas and equipped with SANA-II compatible networking hardware, was finally released last year, following Commodore's demise, by Intangible Assets Manufacturing (IAM). Envoy makes basic networking much easier to set up, and also provides a homogenous networking system that can be used to tie dissimilar network setups together. You might have two Amiga 4000s connected with Ethernet cards, and a third Amiga 600 attached with an inexpensive SANA-II parallel cable connection: Envoy can let them all talk to each other.

IAM software engineers Heinz Wrobel and Dale Larsen have now added a number of features to the package, producing it as Amiga Envoy 2.0. These new features include support of AmigaDOS 2.04 DOS packet types (including record locking and notification), support for removable media such as floppies and Syquest cartridges, enhanced reliability and robust recovery, localisation, AmigaGuide documentation, and more.

The upgraded version is being sold at $25 for current Envoy owners – the retail price of Envoy 2.0 is $59.95 – and Almathera Systems Inc. is the UK distributor for Envoy and other IAM products. Online users can get more info by e-mailing info@iam.com or by connecting to http://www.iam.com/iam on the World Wide Web.

Video on a card

Finally, a use for that little slot on the left side of your Amiga 1200! Quadrant has introduced CardCam: VideoIn, a real-time video capture card for PCMCIA-equipped Amigas. CardCam captures 24-bit colour images from any video source and saves them in IFF24 format. The device has software-selectable composite and S-Video inputs, and can capture both PAL and NTSC video sources (640x576 in PAL, 640x480 in NTSC). The software supports on-screen preview of live video, making it easy to set up live captures or find the right spot in a recording.

CardCam: VideoIn works on any Amiga 600 or 1200 running Workbench 3.0 or later. A hard drive is recommended due to the size of the IFF24 files. Optional Microsoft Windows drivers let you use the card with a PC and Video for Windows as well.

The card retails for $400, and is available from Quadrant International, 65 Valley Stream Parkway, Malvern, PA 19355. Phone (610) 251-9999; Fax (610) 251-9020; BBS (610) 251-9723. You can also get information via electronic mail by e-mailing 75147.2243@compuserve.com with the words "Amiga CardCam" in the subject line.

The author of the CardCam capture software for Quadrant didn't stop there. He's also created a driver that will let you use most PCMCIA modems and serial cards with your A600 and A1200. The PCMCOM device driver lets you plug a serial or modem card in and use it with any Amiga communications software that supports alternate serial device drivers.

COMMUNICATION

The driver supports the hardware FIFO buffers that are built into most PCMCIA modems, allowing error-free communications at high speeds. It also supports connecting baud rates up to 115,200 BPS. The included Preferences program lets you select baud rates faster than those supported in Commodore's Serial Preferences program, which maxes out at MIDI speed.

The software supports the Megahertz X-Jack modems and the Smart Modular Technologies Smart Serial Port card. It also supports most other PCMCIA modems and serial cards, although some AMP, DataRace and Practical Peripherals modems aren't Amiga-compatible and can't be supported for hardware reasons.

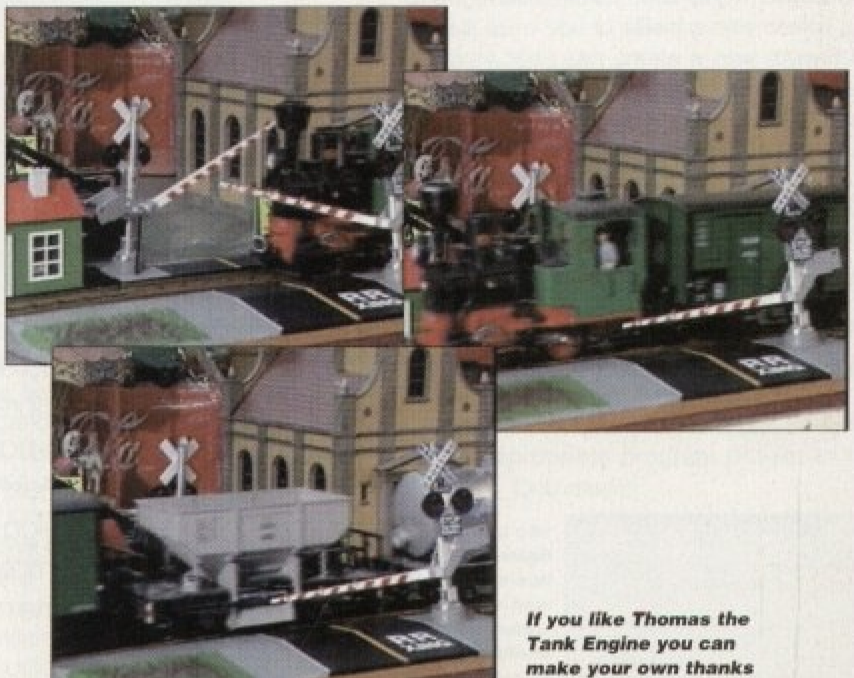
The driver sells for only $35 (plus $3 for shipping in the US, $6 elsewhere) and is available directly from author Erik Quackenbush at 524 Crooked Lane, King of Prussia, PA 19406. Fax (601) 277-9006, or send e-mail to equack@bix.com with the subject line "PCMCIA Info" for more information.

Footage for a field day

Accadia Electronic Arts (no relation to that other Electronic Arts) has a unique new product that will come in handy for Desktop Video producers and 3D artists alike. The CD-ROM, motionclips, contains over 8,000 frames of royalty-free stock footage that can be used in any video project.

Each frame is stored as a 752x480-pixel 24-bit Jpeg file. Import them one-by-one and map them onto objects (such as a TV screen) in your 3D animation, or run them through an image-processing program first to add effects such as Emboss or Oil Paint. There are 20 image sequences in all, including a toy train (pictured here), a shimmering water surface (great for mapping onto a 3-D lake), time-lapse moving clouds, and a cute clay-animation jazz trio.

The CD-ROM sells for $149.95 and is available from Accadia Electronic Arts, 436 West Delavan Avenue, Buffalo, NY 14213 USA. Call (716) 881-5215, or dial their electronic bulletin board at (716) 882-1774 to download a complete list of images.



If you like Thomas the Tank Engine you can make your own thanks to motionclips

De-archiving applications - Workbench 2.0 and above

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_2&3_Only drawer.

The de-archiving procedure has been much improved and now combines the power of the official Commodore installer program with that of Workbench 2.0 and 3.0.

The installer program is designed to be powerful yet simple for the beginner and features a user-friendly interface allowing you to de-archive programs with a minimum amount of fuss. The installer programs for Workbench 2 and 3 users can be located via the icons named:

```
Install[program name]
```

eg:

```
InstallPFM
```

To run, simply double click on the icon which will load up the installer program.

Using the installer

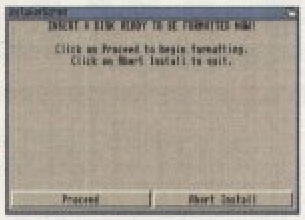
Ignore the buttons that appear when the installer program boots up and simply click on the Proceed button. The program will then copy the necessary files to RAM.

Once this has finished it will inform you that it is about to format a disk in DF0. Click on Proceed, at which point you will be told to insert a blank disk ready for formatting.

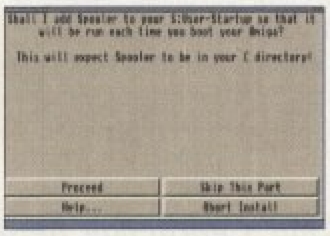
Once you have clicked on Proceed, the installer will indicate that it is formatting the disk in DF0. When this has finished, click on Proceed again to start the de-archiving procedure. When the application has been de-archived you will be told where the de-archived files are. Click once again on Proceed to finish.

If at any time you are unsure as to whether you want to continue installing, you can click on the Abort Install button.

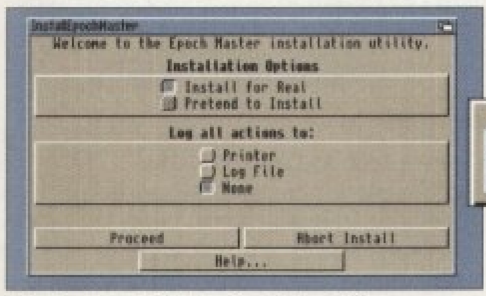
Occasionally, utilities may need to add instructions to your User-Startup file located in the S directory so that they will function correctly. If you want to add the instructions, click on Proceed when prompted.



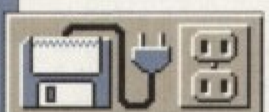
Don't forget to insert a blank disk at the prompt and before pressing Proceed



Any commands that need to be added to your User-Startup can be done with the press of a button



Don't worry about the installer options. Simply click on the Proceed button



The Workbench 2.0 and 3.0 installer icon

The Files drawer contains all the utilities set up so that you can use them from the CoverDisk. A Games drawer is also provided so that you can play these immediately. If you want to install the games make sure you copy all the necessary files across as listed in the CoverDisk pages.

getting started



The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

We have now managed to fix the problem with AmigaDOS displaying a "disk is write protected" requester when a write-enabled disk is inserted. Just make sure you insert a blank disk when the installer programs tell you – and not before or after.

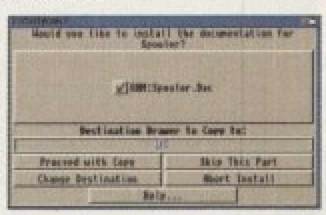
Installing utilities

The procedure for installing utilities is much the same as installing applications, except that you can boot from your hard drive or Workbench disk. As utilities don't need to be de-archived, you are asked to specify a directory on your hard drive or Workbench disk where you would like to install them.

If you don't want to install to the default directory you can change it by clicking on Change Destination. The Show Drives button will allow you to select a new device and directory. You can create a new drawer for your utility to go in by clicking on the Make New Drawer button and typing in the name.

You can also make a utilities disk by running the MakeUtilitiesDisk1.3 program located in the WB_1.3_only drawer and installing your utilities to here. At times you may be asked if you want to install a utility's documentation. A tick box indicates that the documentation is selected for inclusion, but you can click on the box to ignore it or simply click on the Skip This Part button.

The utility installer programs can be found in the appropriate program drawer in the WB_2&3_Only drawer.



You can easily install documents and create new drawer thanks to the installer's user-friendly interface

De-archiving applications - Workbench 1.3

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_1.3_Only drawer.

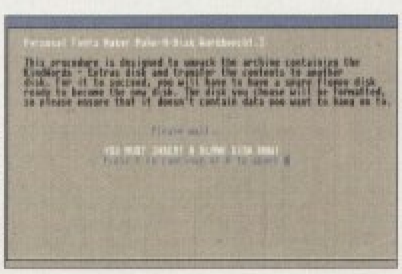
```
Install[program name]_1.3
```

eg:

```
InstallPFM_1.3
```

When you load up the 1.3 installer the program will first prepare itself ready to de-archive the program to a blank disk(s). You will then be asked to insert a disk to be formatted into DF0 and either press y to continue or n to abort.

Provided you answer y, the disk you insert will be formatted and the application de-archived.



After inserting a blank disk press y to continue or "n" to abort

Installing utilities

You should first run the MakeUtilitiesDisk_1.3 to format a blank disk called ACUtilities which will be used to store any utilities you eventually install.

This disk can be used with future CoverDisk utilities until it becomes full. The MakeUtilitiesDisk1.3 program will be a permanent feature of the CoverDisk.

To install any utilities, boot your machine with your CoverDisk inserted in DF0. Utilities can be installed by clicking on their install icon found in the appropriate drawer in the WB_1.3_Only drawer. You cannot specify their destination and any additions to the Startup-Sequence must be done manually.

When installed the utilities are copied to a drawer called ACUtils on the ACUtilities disk.



THE Cover Disks

Talk to the world

With Amiga Computing's exclusive Demon Internet offer, you can take a stroll through the global village for a whole month – free of charge!

Connecting to the Internet isn't just a matter of paying the phone bills. Someone somewhere has to provide you with a link to the wider world of Internet, and they need a lot of expensive modems, data lines, and huge computers to do so. Companies which offer such connections are called 'service providers', and one of the biggest in the UK is Demon Internet Services (DIS).

In an exclusive offer to *Amiga Computing* readers, Demon have agreed to waive the normal £11.75 per month account charges so that you lucky people can take advantage of the company's extensive links to the Internet for a trial period, before deciding whether or not to sign up for good. All you need is the software on this month's CoverDisk, an Amiga, and a modem.

Before diving in and setting up your Demon software, there's one vital task you must perform. As every account holder on DIS has a personal nodename, password, and identifying IP number, you can't all log on with the same one. You'll have to fill out the coupon on these pages and return it to Demon before following this step-by-step guide to getting started:

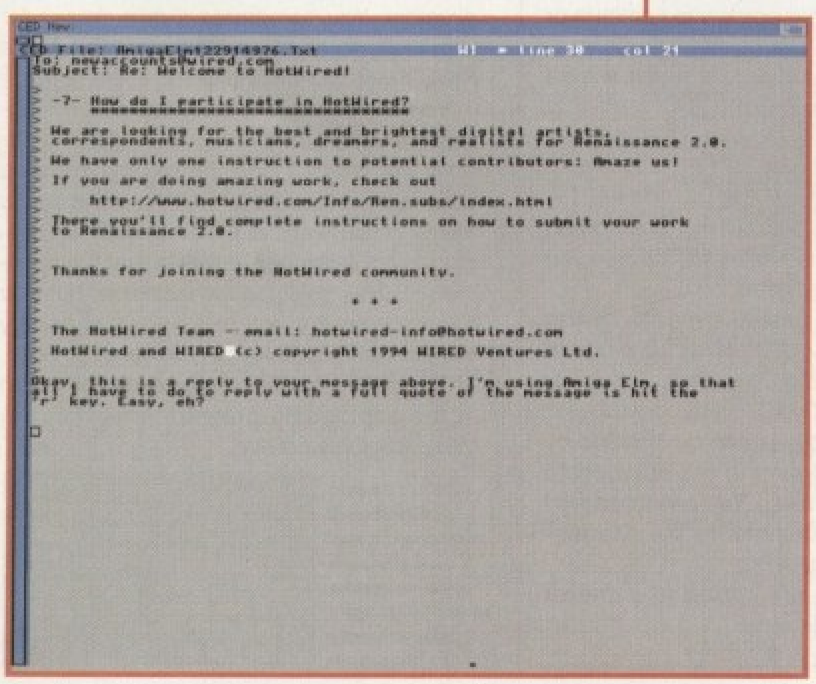
1. Fill in the coupon and send it off to Demon. The reply should take two or three days and will contain one of the three nodenames you specify on the coupon.
2. Use NComm, JRComm, Term, or any other standard Amiga comms package to dial one of the DIS 'Points of Presence' (PoPs – see list). Use the fastest speed your modem will allow and the usual 8 data bits, No parity, 1 stop bit settings (8N1).
3. At the login prompt, type the nodename supplied by Demon. This will identify you as a new user, and you will be asked to supply a password. You won't be able to see this as you type it on screen, so do it carefully and make sure you type the same password when asked to confirm.
4. Wait until the Demon server decides on your IP number, then write this down on a piece of paper alongside your password. Now log out.
5. Insert the CoverDisk in DF0. Those who don't normally use high resolution interlace screens might want to temporarily change their display preferences now as the installer program you are about to run prefers interlace, especially when it offers you a long list of possible PoP phone numbers.

If you have a Workbench 3.0 machine, just double-click on the Prepare icon. If you are running Workbench 2.04, open a CLI and type:

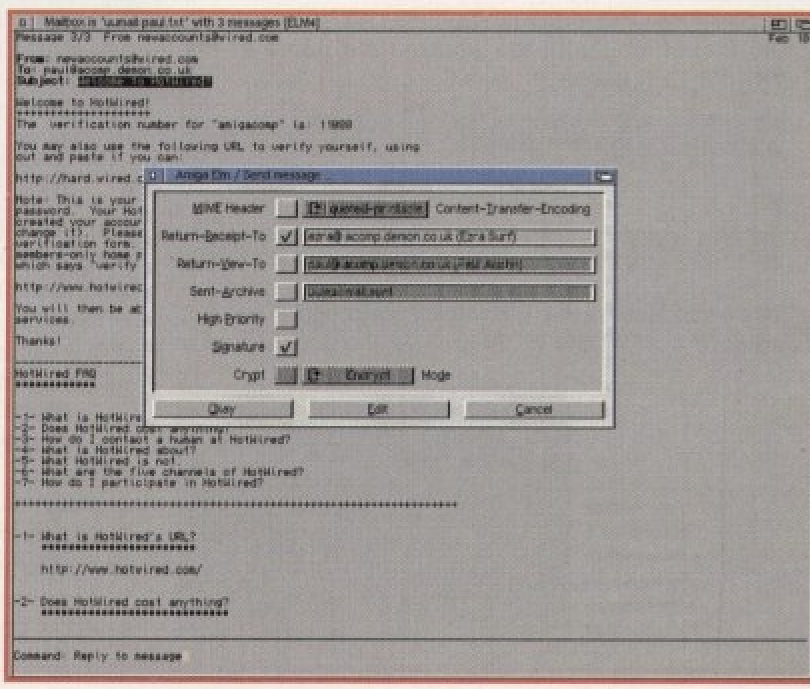
```
EXECUTE DF0: PREPARE >HD>
```

where <HD> is the name of your hard drive, such as DH0: or Work:.

6. Follow the installation procedure very carefully, and read all the notes shown on-screen. These contain a great deal of information about the installation itself and should *not* be ignored.
7. Your hard drive will now contain a directory called AmigaDIS, and inside it there will be an icon called Connect.



Hit the 'r' key to have your editor load with a full quote of the message you are replying to



If you need a receipt to confirm that the e-mail reached its destination, just click on the apropriate toggle box

Assuming you correctly followed the install program, you should be able to double-click on this to have the software dial Demon and enter your details automatically. Now off you go!

Our first session

By now you've gone through steps 1 to 7, you've connected to the Demon PoP of your choice, and should now be looking at a Workbench screen containing two windows. The bottom window can be ignored for the moment. It just reports what the AmigaNOS software is doing, which at the moment will be checking with the news server and downloading messages from your chosen newsgroups (see news panel).

The top window is where you'll type commands, so we'll start with a simple ftp session. File Transfer Protocol (ftp) is the best way to download files from an Internet site, but it also requires that you first connect to the ftp file server, which could be a separate computer altogether or a huge hard drive attached to a local area network on the same site.

To connect to any of the hundreds of ftp servers around the world, you would type ftp then the server's address, so as we'll be starting close to home, type:

```
ftp ftp.demon.co.uk
```

You will see a message stating that the program is connecting to the server, then you will see the following prompt:

220-
220- Welcome to Demon Internet's ftp archive.
220-
220- disabuse.demon.co.uk FTP server. Ready
220- enter user name:

Type ftp and hit Return so that the server knows we're taking advantage of anonymous ftp. The next thing you'll be asked for is your password, which is your full e-mail address. This means that if your user name is 'Joe' and your nodename 'Bloggs', you'd type:

```
Joe@Bloggs.demon.co.uk
```

Remember that you're now on a Unix system, and Unix is case-sensitive. If you have a user name which starts with a capital letter, you have to type a capital letter. The server will now accept your e-mail address and you'll be ready to start downloading.

To avoid long on-line times on this first session, we'll download one of the Demon support documents which wasn't included on the CoverDisk. You can find a list of the commands available on the ftp server by typing 'help' and hitting Return, but we'll concentrate for now on just a few. First, type:

```
cd /pub/doc
```

This will result in a message which says that the 'CWD command was successful', and if you type 'dir' followed by Return you will see a list of the files in the /pub/doc directory. The one we want is called Support.faq and the command to download is 'get', so type:

```
hash
get Support.faq
```

Why did we type 'hash' first? Well, on a typical ftp server you won't get visual feedback on the progress of your download. If, however, you type 'hash' followed by Return, a hash mark will appear on screen to represent every subsequent 1024 bytes of data you download.

By default, the directory in which your downloads are saved by the DIS software is AmigaDIS/AmigaNOS/SLIP/Downloads, and that's where you'll find the Support.faq file we've just fetched. To leave the ftp server type 'quit', which will return you to the window from where we started, and you can log off by typing 'exit.'

Congratulations on successfully completing your first Internet ftp session.

Session 2: E-mail

On-line time, when phone bills are crucial, is used only for sending and receiving e-mail. We actually create and read it off-line using the Elm mailing package supplied on the CoverDisk. To run Elm, double-click on the Read Mail icon, which will bring up a large window, mostly blank, with a number of command options shown at the foot of the screen.

For now we just want to send a message, so either choose the New Mail option from the Mail menu or press the 'm' key. The editor you chose to use during the installation procedure will now load and should contain a blank file with two lines at the top.

After the 'To:' in the first line, type:

```
ezra@acomp.demon.co.uk
```

to send an e-mail to our resident mailbag man. Next, in the second line after the word 'Subject:' type 'test'. Now enter a short message of a couple of words.

When you've finished typing, use your editor's save command or menu option, then quit out of the editor to be returned to Elm. You will be confronted by a window of options concerning Mime encoding (a more advanced topic which we can't cover here) and so on, but the one you want to click on is the second one down.

This will ensure that a receipt is sent to your mailbox to confirm that the message reached us, a receipt which could be your first piece of received e-mail. To 'post' the message, just use the Quit option from the Folder menu or press the 'q' key.

Your message has now been sent to the mail queue and is waiting to be uploaded to Demon's mail server. To upload it, simply double-click the Connect icon again and wait until you have been logged in. Now type 'mbox' to view the current state of your mailbox, and you should see that the message is there.

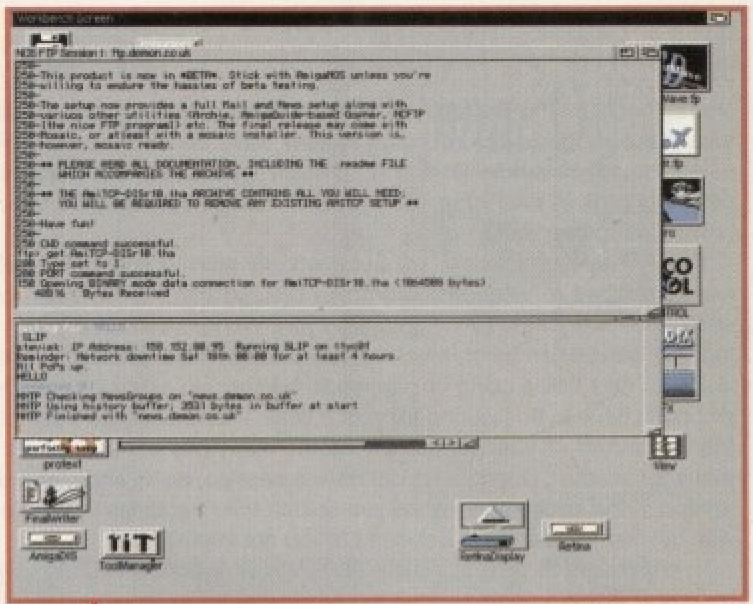
To send it, you have to kick in the Simple Mail Transfer Protocol (SMTP) program, which will scan your mailbox for unposted messages and send them on their way. Do this by typing:

```
smtp kick
```

You should see confirmation that the message has been sent, and you can now log off by typing 'exit' as before. That was your first Internet e-mailing session.

If a message has been received it will be downloaded during the same SMTP session, and you will see it listed in the main Elm window as soon as you load the program again. It can then be read, and if you wish you can choose to reply (using the 'r' key or the appropriate menu item), which will load your editor again.

This time, the message you are replying to will be quoted and each line highlighted by a > symbol to mark the lines out as parts of the message to which you are replying. When you type your own message, exit, log on, and kick the mail server into life – the person who sent you the e-mail will receive a reply complete with his or her original message.



Downloading files using the ftp command needn't be any more difficult than using AmigaDOS

Browsing the Web

The standard Demon software is enough to get you up and running, but for a more graphical display of the Internet and a chance to browse the World Wide Web, you'll need the Mosaic software. To run this, you need AmiTCP and Magic User Interface, all of which can be downloaded from the Demon ftp archive.

You'll find them in the /pub/amiga/amitcp (AmiTCP-DISr10.lha) and /pub/amiga/mosaic drawers (Mosaic_1.2_AmiTCP.lha; mui21usr.lha) and you can ftp them whenever you feel like it, but be warned that they are large files (1.8Mb in total). We'll be running a complete guide to setting up and using these utilities next month, so stay tuned if you want the best in Amiga Internet advice.

Session 3: News

Newsgroups are the lifeblood of the Internet and are where a great deal of the day-to-day activity goes on. You may already have chosen a couple of newsgroups using the option available during software installation, but if you simply left the default groups as they were you should be able to download plenty of examples of how a newsgroup works.

The AmigaNOS software will automatically start to search for newsgroups you are subscribed to when you log on to DIS, so use the Connect icon again and watch the lower of the two windows on your Workbench screen. This will show you that the groups are being scanned and that any new messages are being downloaded. While this is going on, you could be sending e-mail or using an ftp server – you don't have to do just one thing at a time. This is because Internet breaks down the 'bandwidth' of your connection into so many bits per second for one thing, so many for another. During a typical on-line session, news and mail can be whizzing around in the background while you search the directories on an ftp site or use a web browser to search for a document you are interested in.

If you decide to sit and watch the progress window, you will eventually see a message telling you the connection to the news server has been closed – this means all messages have been downloaded. Now type 'exit' to log off, and load the TIN news program by double-clicking the Read News icon.

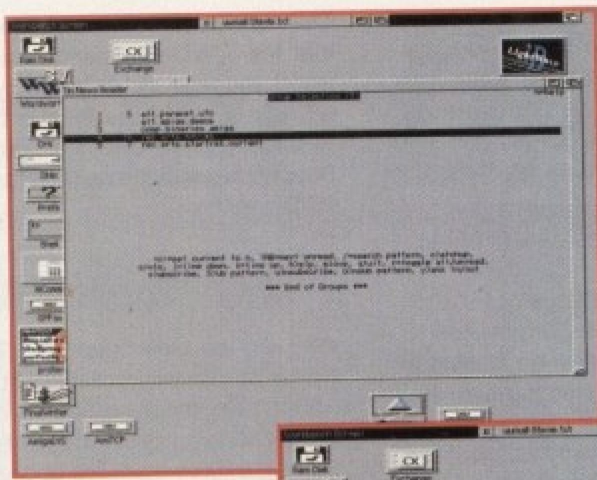
You should see a message stating that news is being 'unbatched' if you chose the batch method (recommended as it makes downloading quicker), then the screen will show the newsgroup titles along with the number of new messages in each. Use the cursor keys to highlight a newsgroup and hit Return.

The next screen you will see is the thread display. A 'thread' is a way of breaking down the messages in a newsgroup into threads of discussion so that you don't have to read a lot of messages you might not be interested in. It also makes it possible to follow all the messages exchanged on a single topic without having to skip through others.

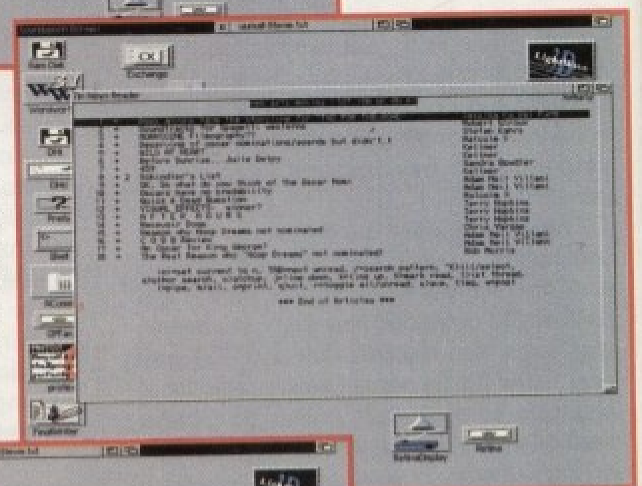
When you highlight a thread you will finally see the message on your screen, and where there are more than one unread messages in a thread, hitting the Tab key will take you to the next one. If you see a message you'd like to follow up on, there are two options.

You can hit the 'f' key to follow up, in which case your editor will be loaded with a copy of the original message just as in the Elm mailer. Type your own comments, leaving in as much of the original message as is relevant, then quit. TIN will ask if you want to post the follow up, edit it again, or quit (cancel).

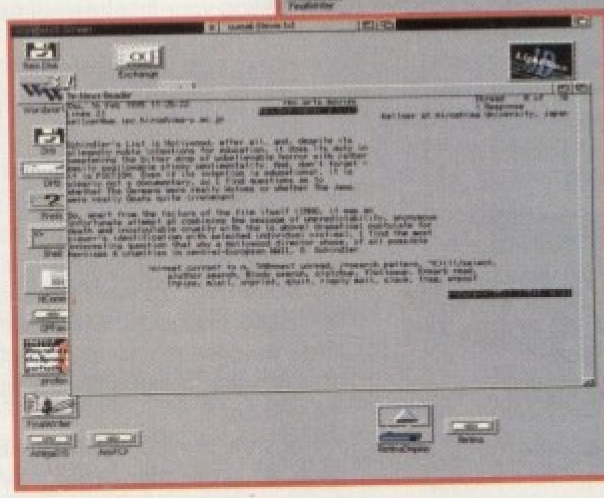
To make a more direct reply which is also less public, hit the 'r' key to tell TIN you'd like to send e-mail to the author of the message. Again, your editor will be loaded complete with a full quote of the original message, and you can type your comments before quitting the editor and (p)osting the reply.



Once loaded, the TIN program should display a list of your chosen newsgroups and a note on how many new messages each contains



Choose to read a newsgroup and a list of threads should appear, again with a note on new messages



Reading news postings and sending follow-up replies to the newsgroup is the same as using e-mail, and just as easy

Terms and conditions for a trial offer of a Standard Dial Up account with Demon Internet Ltd.

The account
Standard Dial Up normally costs £12.50 to join and £10 per month – prices exclude VAT. All accounts are renewed automatically on an annual basis and you are joining our service on an ongoing basis. Those people for their accounts annually receive a VAT invoice and those wishing to pay monthly may do so but should note that we do not issue VAT receipts for monthly applicants.

The offer
Up to 45-days free use of an account. This is a fully working account with no restrictions. In return, we simply ask you to provide a method of payment (see below) which we will use should you not cancel your account. If you cancel during the trial period you will have paid nothing. If you do not cancel, we will automatically cash or collect your money. You may indicate on the voucher the date from which you would like your account to begin. Note that if you join before or on the 15th of any month, you will get the rest of that month free. If you join on the 16th or later in any month you will also get the following month free.

The terms
Applicants must fill out and send a bonafide Amiga Computing voucher to Demon Internet. Duplicates/photocopies are not allowed. Incomplete or illegible vouchers may be destroyed.

Enclosed with the voucher must be a post dated cheque for £155.68 for a year's connection, or credit card details indicating that you wish to pay monthly.

Should you decide to keep your account, as we hope you will, you will be charged the joining fee and the first month's fees. Note that you will have enjoyed a charge free period regardless. All payments are due in advance of using any service.

Cancellation
You may cancel in writing at any time. If you cancel during the trial period you will have paid nothing. If you cancel later on and pay monthly, your account will close at the end of that month. If you pay annually we will refund the number of whole months outstanding on your account. We can only refund using the same method by which you pay.

Name:...

Address:..

....

Tele. No.......................... Account start date..........................

We require three nodenames of your choice to choose from should a duplicate exist within our system. We will confirm which of the three nodenames have been chosen for your account.

Nodename 1: ....

Nodename 2: ....

Nodename 3: ....

Credit card details

Access/Visa [ ] Expiry date [/]

Send your completed voucher to:

Demon Internet Ltd
Gateway House
322 Regents Park Road
Finchley, London, N3 2QQ

0181-371 1234 (Sales - London)
0131-552 0344 (Sales - Edinburgh)
0181-371 1010 (HelpLine)
0181-371 1150 (Fax)
0181-371 1000 (Switchboard)
e-mail internet@demon.net

Mini Office Amiga



The two modules we've taken from the Mini Office productivity bundle are the database and spreadsheet packages, both capable of meeting your day-to-day home office requirements.

Though originally designed to work in conjunction with other modules from Mini Office, they function well as standalone programs. The spreadsheet, for example, can normally take advantage of Mini Office's graphics package to create graphs based on spreadsheet data, but every other feature works fine in isolation.

Once the disk installation procedure is out of the way and you have your disk with the two modules ready to go, double-click on the database icon and we'll start there. Mini Office database is a standard 'flat file' program, which means it works in a similar way to an electronic card index.

To begin with, though, you'll find nothing on your screen. Import the sample data by choosing Load from the File menu, and highlight the Database option. Select the example file listed by the file requester and a small database of names, addresses, and telephone numbers should appear in a few seconds.

NAVIGATION

There are only six records in this sample file, so it's easy enough to navigate using the cursor keys (left and right) or the VCR-style controls at the bottom of the screen. If you were working on a much bigger file, however, you'd want to be able to jump to a particular record much quicker than this.

To do so, choose Set Search Pattern from the Search menu. This brings up a requester listing the various fields in the current template (more on templates later), and you can choose in which field to make the search by clicking on the scroll arrows to the right.

Leave the Name field highlighted for the moment and click on the Setup button. You should now see a selection of Boolean-style search operators which can be used to test the fields.

Select the equals sign and click on OK. You can now type the name you want to search for, then click on the Search button, and Mini Office database will find any records which have exactly that text in the name field. For a more general search, for example if you wanted to find everyone who lived in Stockport, you would use the IN operator which checks whether the text you are searching for is in the field rather than finding records which match it exactly.

The other operators are equally easy to use. For example, if using a club database and you had a field for the amount of subs money owed by each member, you could simply specify '>=' (greater than or equal to) £10, and the database would find everyone who owed £10 or more.

NEW CREATIONS

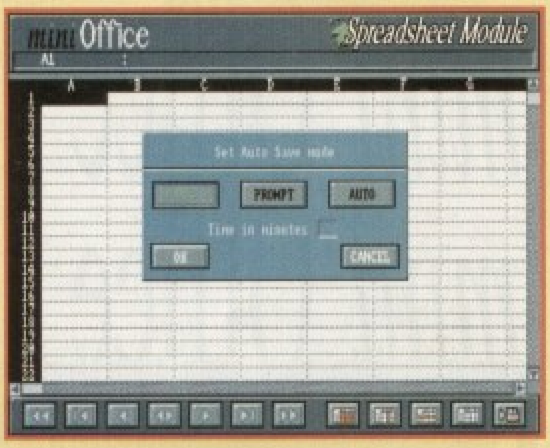
To create a new database, choose Clear Database from the File menu (don't worry – this won't delete the file from disk), then Edit Template from the Edit menu. By clicking twice with the left mouse button you can set up a field anywhere on the screen, making it possible to create a database with any screen format you like.

Once you have typed the name of the field, press Return and the program will ask you to specify what type of field it is (text, comment, date, and so on), and what maximum length it can have. When you select a type and press Return again the field is set up and you can carry on adding new fields until you have enough, hitting the Escape key to finish template editing.

Printing your records is a simple matter of using the Printer Options item from the Printer menu, then printing all records or only those you have marked using the 'M' button on the control strip at the bottom of the screen.



Data retrieval and storage is a quick and easy task when you take advantage of Mini Office Database



Home budgeting makes keeping track of the pennies a much more scientific process

Faulty CoverDisks

If you should find your *Amiga Computing* CoverDisk damaged or faulty, please return it to: TIB Plc, TIB House, 11 Edward STreet, Bradford, W. Yorks BD4 7BH

Please allow 28 days for delivery

Watching the pennies

Our second Mini Office module is a spreadsheet of the type with which most users should be familiar. As it uses a default size of 52 columns by 99 rows, there should be ample space for any small business or home budgeting calculations.

Again there is an example spreadsheet on the disk to get you started, but this sort of program is very easy to use and should present few problems. Let's start by creating a new example, so select New from the File menu and the screen should clear.

In common with other spreadsheets, Mini Office defaults to calculations carried out from the top of a column downwards, so a monthly budget would have a list of expenditure types down the left-hand side (bills, rent, mortgage, and so on), with the amounts entered in the next row.

To let the program know what type of data you are entering, click on the letter at the top of the column, then choose the Layout option from the Format menu. Formats on offer include General (for text and comments as well as numbers), percentages, currency, and so on. This will set the data type for all cells in the column, but you can easily set individual cells by clicking on them and going to the Layout requester again.

Choose the text layout for our first column, then enter the headings under which money is spent. Now enter the amounts in the second column. To create the all-important formula cell, simply click on the cell to select it, then type an equals sign as your first character. Mini Office will realise that you are entering a formula, and will allow you to drag-select the cells to be worked on.

If you type the equals sign and the word 'SUM', then drag your mouse over the cells into which you've just entered amounts, the program will create the formula and display the results when you press return. With auto-calculate turned on (as it is by default), the total of your outgoings will be updated every time you change one item.

This sort of program might not make money appear as if by magic, but it does help to ensure that it won't disappear by the same sorcerous route.

mini Office

The perfect all-in package for your home or business – in it's entireity – saving you £30



Mini Office Full package
Save £30
Only £29.99
RRP £59.99

On this issue's CoverDisk *you already have two of the five mini Office modules:* Spreadsheet and database. Now you can have the entire package for just £29.99, **saving £30 off the RRP.**

mini Office is a very powerful and flexible integrated package capable of performing a vast array of home and office business tasks. Its five feature-packed modules include:

- A professional **WORDPROCESSOR** with powerful graphics capabilities and a 50,000 word spellchecker. Ideal for a wide variety of correspondence and official documents.
- A supremely friendly **DISC UTILITIES** program to make using your mini Office Amiga as painless a task as possible.
- Incredible **GRAPHICS** with more than 18 types of graphs and charts available to brighten up your presentations and make your month-by-month financial situation as easy to appreciate as possible. You can even make use of eye-catching 3D effects!
- Plus the versatile **database** and **spreadsheet** you have on the CoverDisk. The database is simple to use and powerful enough to deal with anything from basic address book functions to club membership lists and business records. The spreadsheet is flexible with more than 50 functions, simplifying the most complex domestic monthly budgets or commercial cash flow forecasts.

This is another great *Amiga Computing* special offer; the entire mini Office package for just £29.99 – amazing! Complete the order form now and send it with your payment to mini Office Offer, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

A500, A500+, A600, A1000, A1200, A1500, A2000, A3000, A4000 Compatible with Workbench 1.3

mini Office Order form

Please send me:

Mini Office at the bargain price of £29.99 (including VAT and p&p)– saving £30 off RRP

Deliver to:

Name (Mr/Mrs/Ms/Miss) ______________________

Address ______________________

____

Postcode __________ Daytime phone __________

I wish to pay by:

☐ Cheque/postal order payable to IDG Media

☐ Credit card

Card No. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Expiry Date __ / __

Please allow 28 days for delivery while stocks last

☐ *Tick this box if you do not wish to receive promotional material from other companies*

Flight of fantasy?



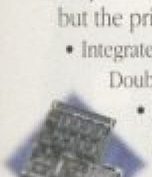
No... with a Blizzard or Cyberstorm Accelerator, your Amiga will fly!

If you've ever sat and waited for your Amiga to catch up, you'll know that an extra boost of power would be just the ticket.
But, the only problem is the cost... isn't it?
Well not any more. When you compare our cost per MIP with other boards you'll be surprised at just how little you'll have to pay to enhance the performance of your Amiga computer.
Then, the sky's the limit!

BLIZZARD 1220/4 4Mb TURBO

The multi award-winning 1220/4 offers by far the best price/performance ratio of any A1200 32-Bit RAM expansion on the market. Of course the 1220/4 also incorporates everything else that a good memory expansion should too, such as a Real Time Clock, further RAM expandability, optional FPU etc. as well as offering a Clock Speed Doubling Circuit which runs the 32-Bit FAST RAM at an amazing 28MHz. Not only does the 1220/4 give Amiga A1200 owners all this, but the price has broken the sound barrier too!

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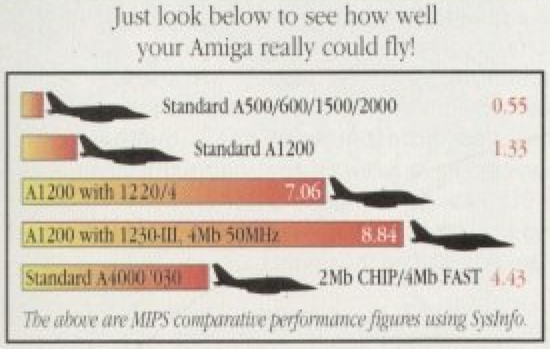


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Sights and

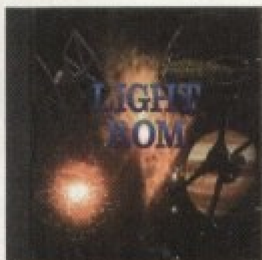
During the past six months this magazine has concentrated on what has been a surprising growth market in an otherwise tough year for Amiga products. CD-ROM titles have proved themselves to be the ideal stalking ground for the dedicated bargain hunter. If a complaint was to be made, however, it was that the collections were too often composed of bits and bobs. These all-inclusive titles are fine, but once you've bought one or two it's unlikely you'd want to get another.

Now, thankfully, there are more CDs being released specifically aimed at certain Amiga purposes, and this should hopefully reduce the hit and miss ratio that previously accompanied these products.

A few months ago we took a look at discs aimed at professional Amiga videographers. Now we turn to the ever-growing support offered to the animator with a side interest in adding sound effects or music to their presentations.

Light Rom

Price: £39.99
Supplier: PDSoft
Tel: 01702 466933



Lightwave this, Lightwave that: There's so much chat about it in the Amiga mags you'd think a new messiah had arisen. Apologies to those who have no intention of buying the bees-knees of rendering packages, then, because here's another product targeted at the blessed few (albeit that there's material included for Imagine and Sculpt users too).

There's all the usual stuff, with spaceships and the like always being popular in this field. Light Rom excels, however, because it has a vast range of subjects that are of more general interest.

For example, the phone category has some highly detailed objects giving fine demonstrations of an imaginative use of lighting. The coiled telephone lead may sound less than fascinating, but it is a difficult form to model and could prove useful when combined with other furnishings in a scene.

A catalogue has been supplied for each directory so it's possible to preview a small version of the images. This makes the disc exceptionally easy to use because you don't have to render a model to know if it's worth it.

There's also a large range of textures to choose from, plus black and white bump maps. The latter are used to overlay brick effects and the like on to surfaces, so they should be a welcome addition despite the fact that they can be tricky to use correctly.

Light Rom is going to receive periodic updates, so the makers claim it's a great educational resource for Lightwave users. That's as may be, but one thing is for sure: Products featuring quantity, quality *and* bargain prices like this come once in a blue moon. If you can use it, buy it.

Ease of use	**9**
Implementation	**10**
Value for money	**10**
Overall	**10**

Raytracing 1 + 2



Those who have invested in rendering software other than Lightwave, and who are sick to death of hearing about it, will probably take more interest in these two CDs. Imported from Germany, most model formats are covered here including Imagine, Real 3D V2, Sculpt and Maxon Cinema, though Lightwave users are not excluded.

Each disc may appear to be chock full, but as usual with these CDs it's not so wide ranging as it first appears. On the first CD many of the same old pictures are repeated across all the formats – and when I say old I mean it, because you'll probably already have a lot of these chestnuts. They've taken stock images and used a converter to port them across formats.

This can create some problems. Some packages only render one side of each polygon, whereas others render both. Images transported from one package to another can come out with bits and pieces apparently missing, and it's then necessary to go into your modeller to realign the polygons.

A lot of the models require work if you want them properly detailed. For example, there's a perfectly good design for St. Pauls but it comes in a uniform grey colour. Making the most of the model will at least require adding an overall stone texture, plus separate surfaces for the windows and other details. Still, it's a useful start.

Unfortunately, this same model exemplifies a serious problem found with some of the examples on the CD. Errors have occurred in the translation between programs, and it's as if nobody has bothered to check them. This makes some of the images unusable.

There's a tyre, for example, with a gaping hole, missing because of an absent section. This means that it's actually quicker and easier to model the thing from scratch than to mess around trying to repair the model on the CD.

Redemption might have lain in the fact

Sound Bytes

Want to add a roaring thruster SFX to your spaceship animation? Or perhaps you need new sounds to tinker with in your preferred sound editor. Once again we discover CD may have everything you want – but you'll need the patience to find it.

Music MOD & SFX

Price: £9.99
Supplier: 17 Bit Software
Tel: 01924 366982

I'm sorry to say it, but this CD has all the traits that can make ROM collections infuriating. These libraries are vast enough to give you the digital equivalent of agoraphobia, and it's about time compilers realised that proper cataloguing is essential.

The problem with this CD is that each of the 6300 instrument or sound samples is arranged alphabetically rather than by music type. This means you'll find snare-drums next to a sliding car sound effect; it's not very helpful. It's inevitable with this type of collection that it's rather a mixed bag as far as quality is concerned, and thanks to its confusing organisation this will mean that tracking down the desired material could take a huge amount of time.

As far as I'm concerned, it would be preferable if the developers were less concerned with stuffing their CDs until they burst at the seams and more bothered about quality. I'd much rather have a quarter of the material if what was left was the pick of the crop. Of course at this price it's wrong to be too harsh on a collection, and some people may be able to find it useful.

Ease of use	**5**
Implementation	**6**
Value for money	**7**
Overall	**6**

that these CDs include a comprehensive guide, a welcome feature when you consider all too few CD-ROM titles feature enough supporting documentation. It's a shame, however, that the interface hasn't been translated from German – an oversight which makes for confusion.

Price: £19.95 each
Supplier: PDSoft
Tel: 01702 466933

Each disc features a directory of textures, and in fairness these are of a high quality and should be useful for rendering and other purposes as well. It's good to see another CD featuring thumbnail previews, because trawling through image after image can be dauntingly boring.

As usual with most CD collections, there's bound to be the odd thing to interest anyone, and for virgin renderers who haven't seen the standard PD models before this, it is not a bad start. It's just too bad that sloppiness has undermined what would otherwise be a thoroughly worthwhile collection.

Ease of use	**8**
Implementation	**6**
Value for money	**7**
Overall	**7**

Video Creator

Price: £29.99
Supplier: 17 Bit Software
Tel: 01924 366982

"Everybody in their place ! C'mon !" Cue killer base as a chilled synthetic loop stabs in: "Aciieed !"

Okay, so I'm about five years out of date with what's hip on the dance floor, and the club-going fraternity won't have anything to do with me on account of my brown cords and golfer's checked sweater. All the more reason for me to get excited about having my own party on my CD32

Mickey-taking aside, this has got to be one of the most powerful and flexible pieces of software designed purely for the sake of light-hearted fun. Available either for the A1200 or the CD32, this has the advantage over the other CDs of being a self-contained package with everything you need to create your presentations on one disc.

Your 'videos' are composed via an editor which is simple but flexible in use, and your visuals can be synchronised precisely to fit in with your music. Any music disc can be used with the package, which is something of a relief when you hear the example track included.

There's an impressive range of effects to apply to the images, with all manner of screen wipes and transitions available. The PsychoCycle feature allows for real-time colour distortion and 3D colour images can be superimposed onto background video.

With almost 1500 images being provided on the disc, you begin to realise what good value this is. What's more, you can load your own images into your 1200 or an expanded CD32. When you're happy with the results a presentation can be recorded onto any video. There's also optional full-motion video support for anyone with an FMV cartridge fitted.

One limitation for CD32 owners is the lack of a storage facility so they can return to edit 'videos' at a later date. Of course, this can be overcome by connecting the console to any Amiga via a serial link, or alternatively by using an SX-1 which will give the machine storage back-up.

If you're given the choice between buying this or the latest game release, I recommend you give Video Creator the consideration it deserves. Yet again, Almathera are giving a unique product away for peanuts.

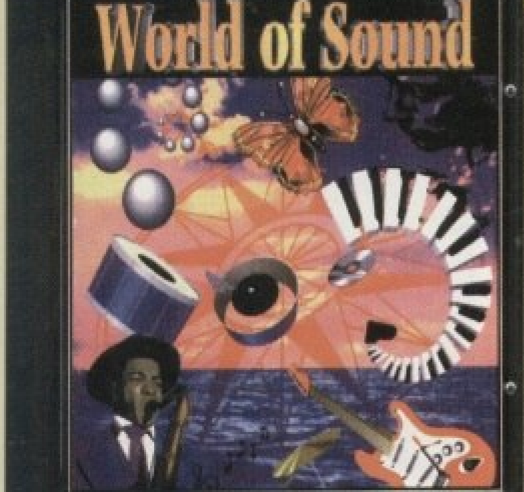


Ease of use	**9**
Implementation	**8**
Value for money	**10**
Overall	**9**

sounds

3D animations and presentations accompanied by sampled sound need not cost the earth, especially if you turn to CD-ROM. Gareth Lofthouse finds out what's on offer

World of Sound



Price: £ TBA
Supplier: World of CD-Rom
Tel: 010 31 4990 60060

Another combination of samples and modules, World of Sound has the advantage of being organised into proper categories. Hence, if you want sounds most suited to house music you will find them collected in their own directory.

Sound effects are helpfully subdivided so that vehicle, weapon and various other noises can be found together. However, though this works better than with the other CD you'll find the odd sample sticking out like a sore thumb in the wrong drawer.

This package seems to have more aimed at the techno music field, which is fine because I suspect this is where most of the demand for Amiga music lies. Some of the samples could be used to good effect, or alternatively they could be ripped out of the modules using something like Octamed. In terms of organisation, then, it's still less than perfect, and a bit more information in the form of read.me files would have been nice. That said, it's a welcome addition to the area of audio software and should yield some treats to the diligent hunter.

Ease of use	**8**
Implementation	**8**
Value for money	**N/A**
Overall	**8**

City

Come on, you lazy lot, admit it. You can't be bothered to create your own objects for use in ray tracing. It's nothing to be ashamed of. In fact, when there are so many collections of high quality common or garden objects floating around out there, you'd have to be barking mad to spend lots of valuable time re-inventing the wheel.

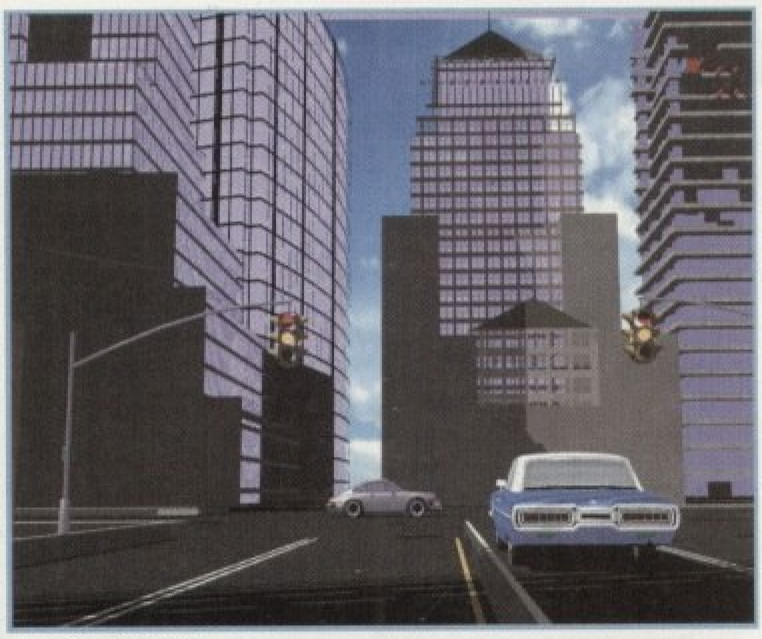
Fair enough, any 3D enthusiast will tell you that a great part of the attraction is building something from scratch, but is there really any point in becoming the millionth person to model an office chair or an electric cooker? If you're using certain objects just to fill out a scene, why not pick up the phone and order a skip-load of the things?

Well, for one thing they can be pricey, and you'll pay £1 and upwards per model for something as simple as a kitchen cabinet. But hold on there horsey, ever tried to model something as 'simple' as that? The basic box part is fine, but then you've got the handle, some inset detail on the door, and there's the wood grain to get right. By the time you've perfected that little lot (rendering each time to test the effect), you've spent an hour or more on a single boring piece of furniture when you could have put the time to better use elsewhere.

Two new batches of models designed to make life easier fall under the microscope this month. One of them – City Builder – is much more large scale than the other, so we'll start with something a little closer to home.

Interior Design is a collection of household and office furniture supplied in three volumes and aimed at those who want to get their room designs out of the way quickly. Each volume contains 50 or more objects complete with all the necessary image maps, sample scenes, and surface settings ready for use in Layout.

As with most commercial offerings, these objects have been created to match the real-world size of their physical equivalents, and objects from one volume can be used with objects from another with no need to re-size them. Volume I covers living room, dining room, and bedroom, Volume II takes care of the kitchen and the bathroom, while Volume III concentrates on office furniture.



By using the traffic lights and road templates, then adding a couple of standard Lightwave cars, a city scene can start to come to life

Few appliances are included, especially in Volume III, but there are some lights, dishwashers, cookers and so on. The office scene you can see on these pages uses an A3000, a monitor, and a venetian blind to add a bit of detail, but otherwise a complete interior scene can be built very quickly using only the supplied examples.

In addition to the real world measurements, each has its rotation point set to the middle of the object, and there are versions of most cupboards with and without doors to make animation easier. For those who are inexperienced with Lightwave surfaces, the models are fully surfaced with all settings designed for the correct dimensions, which means you can't see the grain on a wooden chair from 20 feet away as you often can in amateur renders.

DESIRES

Of the three collections, Volume III is the least desirable, if only because office furniture is so boring in the first place. The various computer desks, filing cabinets and bookshelves are well modelled, but as they are based on soulless utilitarian furniture in the first place, they don't exactly shine.

Bathroom and kitchen objects, covered by Volume II, are more interesting, as are the other household models in Volume I, but it would perhaps have been a better idea to offer a cut-down version of each set as an all-in-one house building kit rather than sell them separately. Regardless of this minor whinge, the Interior Design collection is a good place to start for anyone who needs walk-through interiors in a hurry.

If you're thinking about interior design in a serious way, and require highly detailed objects to give that potential customer a warm glow in his or her cheque book, I'd advise scouting around for other collections first. The models are fine, and the presentation of the set makes using them easy, it's just that several of them don't resemble any furniture I've ever seen or would want to buy, even if they are the right size and well surfaced.

City Builder is a very different proposition, and offers a range of highly detailed buildings for use in creating cityscapes from scratch. In terms of its content, the collection is far more glamorous than the Interior Design set, but then no-one ever said a printer stand could match the Chrysler Building for visual appeal.

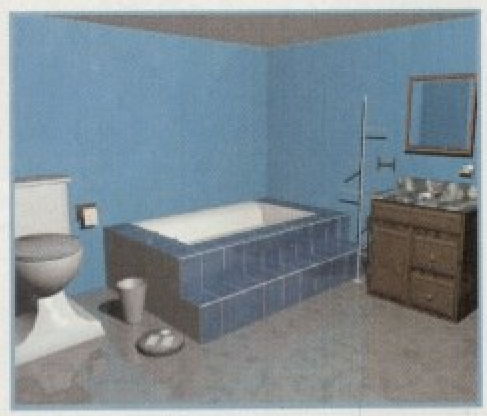
Unfortunately, the hugely accurate models (and some of them really are huge) are all taken from US cities – no Big Ben or Wolverhampton Civic Hall, I'm afraid. This means you can have a fly-through of Chicago or New York, but a helicopter trip around Rochdale is definitely out of the question.

Luckily for the non-US user, a series of very useful alternatives have been added in the shape of miscellaneous hotels, banks, apartment buildings, petrol stations, and so on. These can be used for almost any setting, from a decent sized town to a section of a city, and with a little bit of editing the whiff of Americana can be removed.

Building blocks are also included to make it easier to create skyscrapers of your own design, and there are trash cans, traffic lights, trees, and road templates to get you started on the small detail. Again, these are based on US designs, and the traffic lights in particular would look out of place in a London scene.

As with Interior Design, the full complement of image maps, surfaces, and example scenes can be found lurking on the five disk set, so there's no need to do anything other than lay the city out and render it. The only problem on this side is that the buildings are so big they take up large chunks of memory.

To load and render one of the example scenes you'd need about 12Mb RAM, but using the various smaller buildings with a couple of larger ones thrown in can reduce this to much more manageable proportions. For distant skyline shots or those desperate to save on memory or rendering time,



The bathroom objects are accurate for size, but who would want such an ugly bath as this?

Scale tips

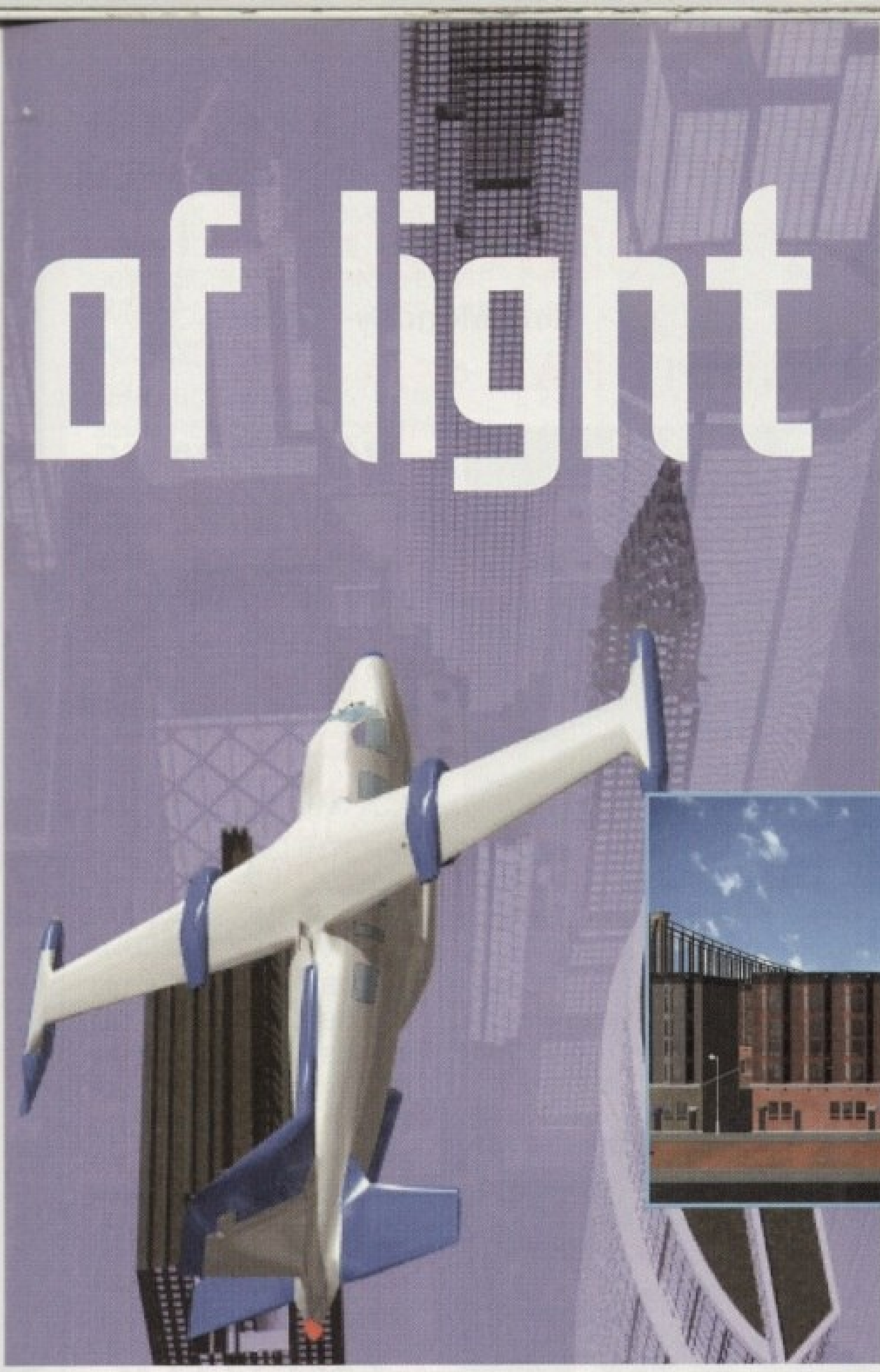
A tip for any budding Lightwave user out there – use real-world measurements! Both object collections reviewed in these pages are supplied with models using exact real-world dimensions. In other words, if a table is 70cm tall in real life, the Lightwave modelers who put these collections together have ensured that the model is 70 virtual centimetres tall.

The Sears Tower is a hell of a lot bigger, but it too is supplied using the correct measurements. You wouldn't believe how much time this saves when it comes to combining models from more than one source in the same scene.

It is also a lot easier to achieve a realistic look for your models if you first measure the real-world equivalent, then apply these measurements in Modeler. For example, can you tell me off the top of your head just how long your car is, or how tall that wardrobe in your bedroom is?

Probably not, and modelers who choose to ignore the importance of measurements usually come a cropper later on. A model can look fine when it's being built, but stick it in a scene with other objects which may or may not be exact, and there will be a proportion effect which can range from slightly 'off' to horrendously inaccurate.

of light



Steuie Kennedy takes a stroll down 5th Avenue and redecorates his virtual house with two new collections of designer objects for Lightwave 3D

Building your own cities from scratch is a pain, but this rough layout was knocked up in three minutes flat using mostly generic objects



Ah... you can almost smell the smog. City Builder is ideal for creating stunning fly-throughs. Just like back in Saigon, eh?

the larger models all have Lo-res equivalents which, though not very attractive close-up, are perfect for many other uses.

One area which the set neglects a little is the ground itself. Laying out a 3D city is all about placing the roads first, then popping buildings in around them, and a few ground level templates would have been a useful addition.

There are several excellent road sections, including flyovers and merged lanes, but there's no generic pavement object or even a big polygon coloured tarmac grey. However, templates exist from which a four or six-lane highway can be extruded, and there are small sections of street which include pavement, road markings, and drains, so complete scenes can be built using these. I'd just have liked a couple of layout plans, that's all. Call me picky.

The buildings themselves are very impressive, and if you ever wanted a glitzy fly-through scene but didn't know where to start, then you do now. I compared a couple of piccies of New York with objects such as the Chrysler and Empire State Buildings, and the modelling accuracy is superb.

From the ranks of windows which are automatically surfaced to look as if they are reflecting a cloudy sky, to the entrance doors on the ground floor, these skyscrapers are the biz.

Even more impressive is the football stadium and the LA City Hall, whose structures are less linear and straight-up than the average skyscraper, and some of the larger buildings come with their own plaza area around them. The UN building, for example, has a fair bit of groundwork and other detail as well as the building itself.

For the professional user with an eye on city fly-overs and fly-throughs, this set is well worth the purchase price. UK enthusiasts who just like messing with buildings will find the generic building blocks and common buildings very useful, especially as these reflect the same attention to detail found in the more famous models. There's also the added bonus of a few sheets of manual with sensible tips on using the models to best effect.

You won't be using this collection unless you have a fair amount of memory, but for those who do, it will serve up a great many urban scenes with little difficulty.



Habitat would have a fit if they saw this kitchen, though the wooden cabinets and other furniture are good enough for walk-through animations



Ugly furniture might actually be an advantage for Volume III, because most of the real stuff is every bit as dull and uninspiring

The bottom line

Product: Interior Design vol I, II, III
Supplier: Anti Gravity Products
Price: $45 each
Tel: (0101) 310 393 6650

Ease of use	**8**
Implementation	**7**
Value for money	**8**
Overall	**7**

Product: City Builder
Supplier: Anti Gravity Products
Price: $120
Tel: (0101) 310 393 6650

Ease of use	**8**
Implementation	**9**
Value for money	**9**
Overall	**9**

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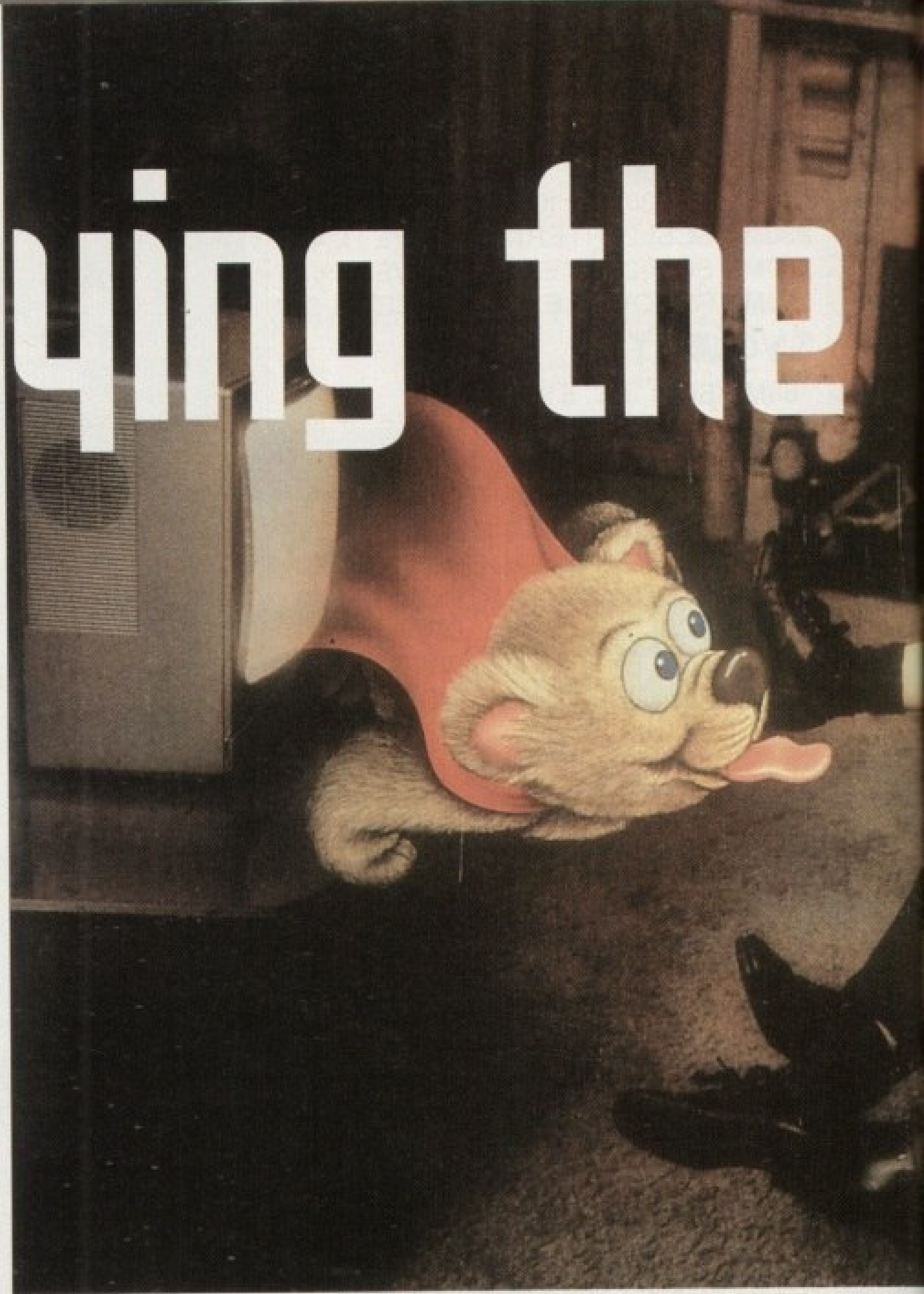
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Playing the



Video games have always been a source of controversy. Even back in the days when the software was at the Space Invaders stage, there was concern about the effects that such addictive, repetitive activity would have on its young players.

Now however, the industry is bigger and the issues more serious. Violence and sex is in demand from an adult audience that has grown out of cutesy platformers, and the hardware is there to give it to them in a more graphic form than ever.

Yes, there is now a new generation of gamesplayer. Console kids are not the only ones the software developers have to cater for and they are finding that there is a more mature market ready for a different type of game. But there is the danger that as games become more graphic, the industry could stand accused of polluting the minds of the young.

As usual, opinion has too often been divided into opposing camps. Some, encouraged by the media, would point to computer entertainment as yet another source of society's decline, while others fiercely defend the software industry's right to grow up. For the decision-makers, however, finding a fair balance has been the key challenge.

The industry has not sat back on its heels over this issue. ELSPA, (European Leisure Software Publishers Association), the industry's self-appointed body, set up a system of self-regulation last September. Under the voluntary scheme they established, each member of ELSPA now includes an advisory sticker to state the age suitability for retailers' and parents' information. Though it is a non-enforceable system, it was generally welcomed as a step in the right direction.



Both these games are beat-'em-ups but one has far more realism – where will the line be drawn?

Besides, the legal framework has been there in the background for over a decade. Though most games were exempt under the 1984 Video Recording Act, the law stated that any game which included human sex or gross violence towards humans or animals required BBFC (British Board of Film Classification) legal certification.

GRAPHICS

Admittedly, this was pretty much immaterial in the past as the basic graphics in games meant they were seen in the same vein as cartoons. But now it's a different story – graphics look real. Seeking some

loopholes in the system

Now is a time of adjustment and the law is not without its grey areas. Okay, so acts of violence against humans or animals may be controlled, but imagine a Doom variant where there are vivid depictions of slaughter, blood and guts but where all the victims are fantasy monsters. Such imagery could still disturb the young, yet Mark Strachan admitted that: "If it's not a human or animal it will be exempt from the Video Recordings Act." Though the Obscene Publications Act may cover some of the cases, it seems there may be a gap in the current legislation.

On the publishers' side, Keith Smith of Millennium sees the Home Office guidelines as a potential problem. "If you use this as the reason for developing a certification policy, then games' publishers will use images that don't look a bit human. Maybe this is better. If gamesplayers are only committing acts of computer violence on worms with fangs and fluorescent green blood then they will enter society as normal, well balanced individuals...come on really!"

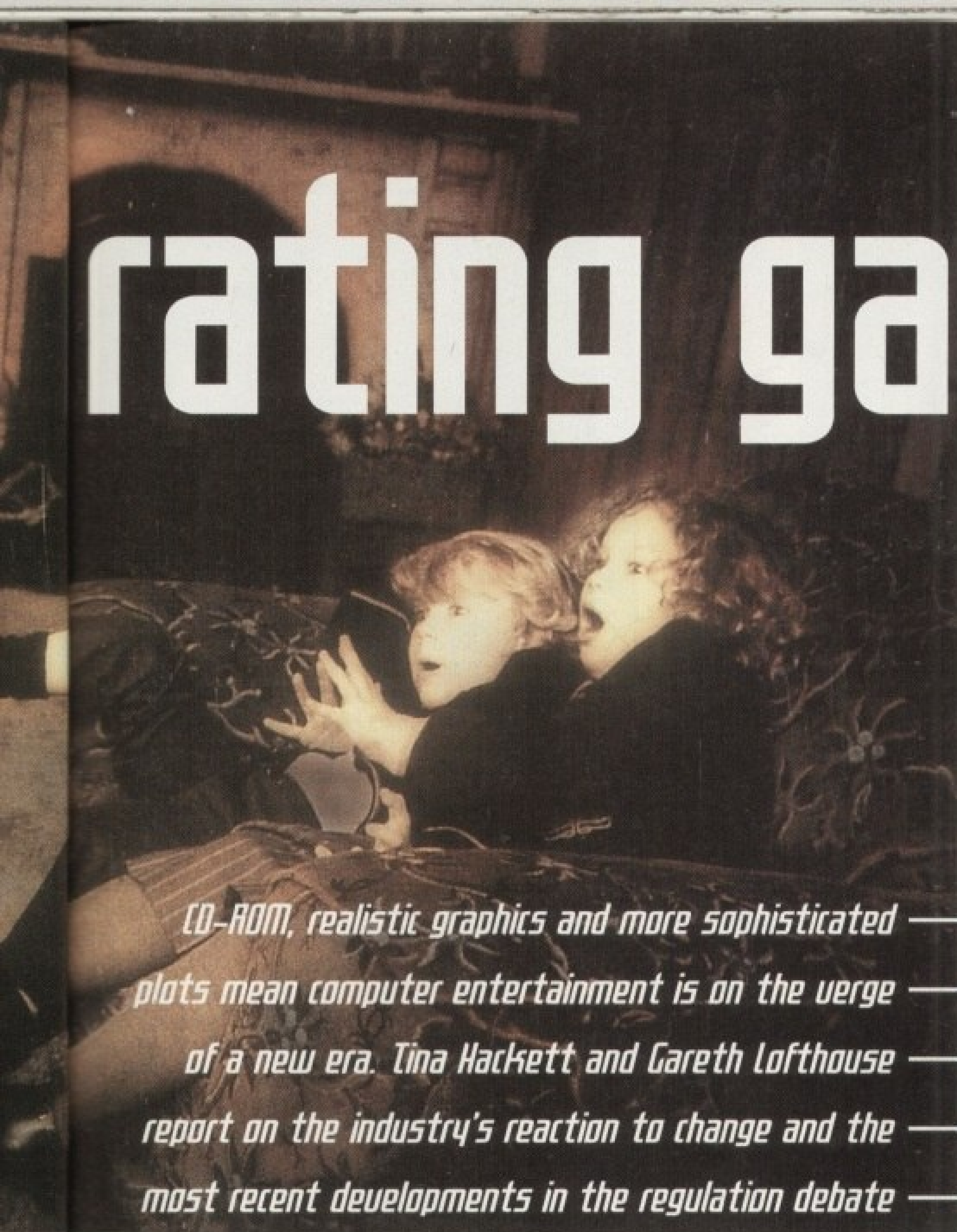


Mark Strachan, ELSPA's chairman: "pleased with the response to the ratings system"

To their credit, the regulatory bodies realise they have to be flexible to deal with developments in the games industry. Laurie Hall of the VSC pointed to how much the public's view of games software could change within a few years. More worrying is the fact that an irresponsible few could bypass the regulations with Public Domain software.

Hall believes that regulating PD software sold in physical form by distributors should be possible, but there are dangers with material being downloaded from BBSs. These would be extremely difficult to monitor and, as Hall himself pointed out, the developers could be a lot less scrupulous than the major companies.

Finally, the classification process involves practical difficulties. The BBFC charge for every minute of their time and this could push cost up considerably for a game that takes weeks to complete. What's more, even if this problem is solved there's no guarantee that the evaluator will see every part of the game. Mortal Kombat, for example, has secret finishing moves that are extremely violent and tricky to find – ultimately, a lot could come down to trusting that the publishers will reveal all.



rating game

CD-ROM, realistic graphics and more sophisticated plots mean computer entertainment is on the verge of a new era. Tina Hackett and Gareth Lofthouse report on the industry's reaction to change and the most recent developments in the regulation debate

ELSPA, the collective voice for the software industry, introduced the voluntary rating system for its members

clarification on the state of the law, ELSPA and the VSC (The Video Standards Council) approached the Home Office. In reply, the HO stated that if a game character looks human, it should be treated as human for the purpose of the law.

This may not sound like much, but it kicked off quite an outcry in the press. "We could be about to witness the death of a whole gaming genre," cried an article in Computer Trade Weekly predicting an end to games like Mortal Kombat and Doom.

This was perhaps a rather alarmist attitude to take, but it does leave publishers and developers with a dilemma. Do they tone a game down for fear of having an 18 rating slapped on it and having to pay the BBFC for classification, or do they continue to develop for a smaller market? Mark Strachan, ELSPA's chairman, was keen to dispel the fears of media alarmists but accepted the importance of the Home Office's statement. "Taken literally," he said, " it could have a lot of implications for our industry. Any game which has anything like a human in it will be under the Video Recording Act, which could cause serious problems for publishers."

Currently, ELSPA are recommending that all titles rated in the 15 to 18 bracket under the voluntary system should be prepared for possible certification. Ultimately though, the future of adult-themed games will lie with the publishers, many of whom were reasonably optimistic. Nick Walkland, European PR for Empire stated: "The 18+ market may appear to be a more limited one, but the simple fact is that an 18 label ➤

The red tape

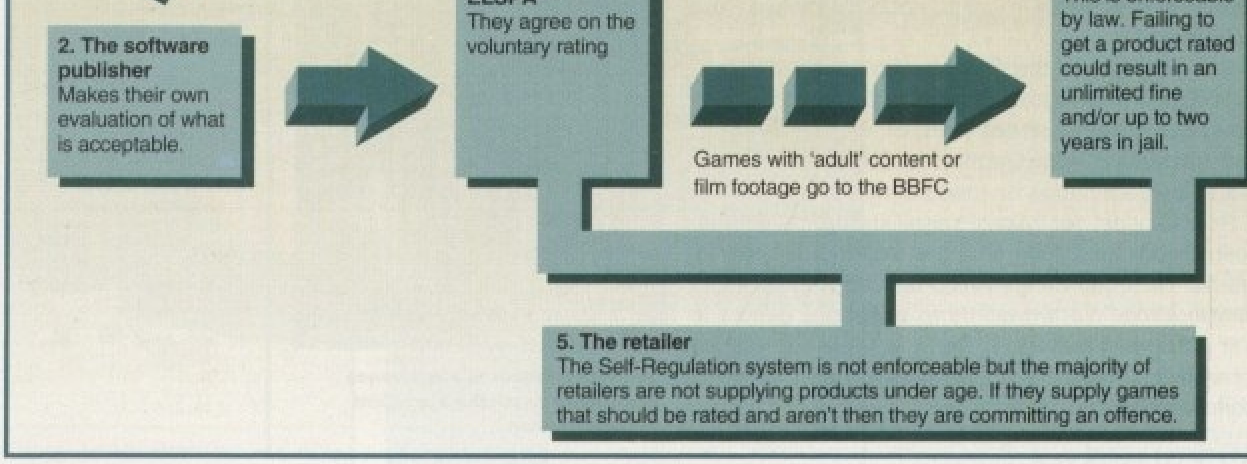
A summary of the legislation currently in place

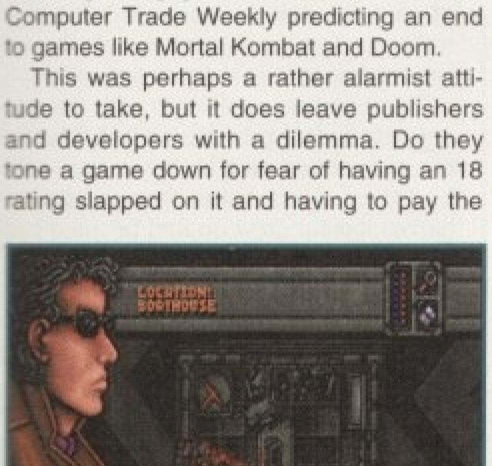
The Video Recordings Act 1984 – this states that all video works should be submitted to the BBFC for classification. Leisure software, however, is exempt from the act unless to 'any significant extent' they depict or encourage human sexual activity or gross violence towards humans or animals.

The Criminal Justice Act 1994 – a loophole in the Video Recordings Act meant that software in cartridge format was exempt from the act. This new act takes cartridges in to the law.

The Obscene Publications Act 1959, 1964 – this made it an offence to publish an 'obscene article' which it defines as something that 'depraves and corrupts' its audience. The act has been amended to keep up to date with technology. Computer software falls under this act. Unfortunately, it's notoriously vague.

How the rating system works...





Empire's Dreamweb had an interactive plot involving sex, drugs and violence. Will game makers shy away from similar adult titles now?

will raise more interest in the punters' eyes and that, in turn, will make more people try it out. For that reason, there will always be some software houses developing adult-themed games."

Some see the 18 sticker as an unthreatening safety net – the developers can be as bold as they like as long as the title is given an 18 certificate (provided it doesn't fall foul of the Obscene Publications Act). Then it becomes a matter of deciding what is adventurous rather than just tasteless.

SUSPICIOUS

Despite the software houses' desire to show a responsible face, however, the involvement of the BBFC has caused some underlying suspicion. Nick Walkland said: "Interfering bods who have nothing better to do than sit in a room making judgements over what people should watch could well cause problems."

On the other hand John Hare, the MD of Sensible Software, sees the limitations on creativity and originality coming from elsewhere. According to him, the problems for Sensible come from what the big hardware manufacturers like Sega allow on their machines, and what the distributors are prepared to sell. Hare accepts the need for proper regulation, but fears that some of the people in control of the industry are too conservative. "A minority are out of touch," he said, "and they're not willing to budge. In my opinion they could do a lot of damage."

In his view, those working against adult content in games are fearful of the unknown. He points to the drug culture as an example: "Anyone involved in the drugs culture will know the pros and cons. It's much better to educate people by having a realistic outlook than pretending we're in an Enid Blyton world."

Hare's views may be controversial, but in one respect he represents the common consensus. Everyone appears to agree that we should not insult the gameplayer's intelligence. As Roger Bennett, general secretary of ELSPA, told *Amiga Computing* following the establishment of the voluntary regulations: "There is a lot of patronisation of the youth of today to assume they can't tell the difference between fantasy and reality." Let us hope all parties remember this when applying the Home Office's advice.





Some were quick to claim that certification could mark the end of the beat-'em-up genre



The voluntary age-rating scheme provides a guide for parents, but isn't legally binding

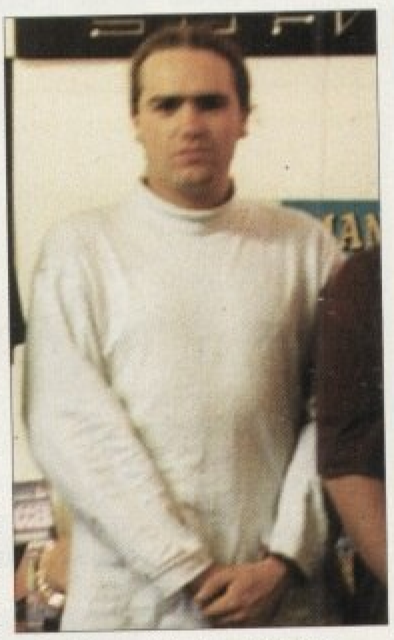
Different strokes

It is pretty much agreed that regulations should be done on a country to country basis rather than on a global scale because of cultural differences. This proves a problem for developers too – what is acceptable in one country may not be elsewhere.

John Hare points to black humour as an example. He thinks that in this country we understand it, but in the States they don't. Sensible Software are overcoming this by literally doing a translation of their games, with one version for Europe and one for the States. Hare said: "You've got to translate the humour and also the morality. Something which is morally acceptable here might not be elsewhere and vice-versa."

Sensible are not the only ones to have faced this. MicroProse had to translate more than just the language on their current project, Pizza Tycoon. The translation from German to English meant the sexual content had to be toned down.

Rob Davies, for MicroProse, stated: "We have been aware for a long time that cultural differences are not limited to things which fall under each rating classification. We always try to adapt our games to suit different markets. If there is legislation to be formed it should be on a country basis and not world-wide."



John Hare points to a difference in cultures as posing a problem for certification

A new frontier

It's easy for the media to hype an issue for the sake of a good story. At the moment we are still only talking about the minority of games – in fact, only 1 per cent of titles so far have been given an 18+ rating. As Strachan points out: "It's very easy to pick up on extremes. Statistics prove only a tiny minority are excessively violent – the rating system is working." The industry has taken a responsible stance on the issue, but ultimately a lot has to be down to parental responsibility. Worryingly, some frightening research shows that while 60 per cent of parents exert control over what their children watch on television, only threeper cent monitor what games they play.

This has had a lot to do with the parents' technophobia and the fact that the computer often gets hidden away in the bedroom. Hopefully though, as the gamesplayers grow up and become parents themselves this problem will lessen. The computer industry cannot be expected to regress, it must move with the times and keep up with other forms of entertainment.

On the whole, few could deny that the industry has taken a positive and responsible role in responding to the needs for regulation. Keith Smith of Millennium, however, warned: "We should not dictate what is watched based upon the politics of fear." If video entertainment is to grow up, it appears that the shrieks of media hype must be resisted.

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Premium print

Owning a high-class printer is all very well, but Amiga owners often find they can't make the most of them. Now Gareth Lofthouse reports on a program designed for those who need professional results



Computers and printers – anyone who's experienced the frustration of trying to get them working properly together will know what's meant by the phrase 'a marriage made in hell.' You can lay a page out that looks great on-screen, only to find your printer just isn't giving the results it's supposed to give.

Alas, JAM's new version of Studio Professional does not provide the all encompassing solution to these tricky problems, but if you're an Amiga owner who requires top-notch results it could help you maximise your printing potential.

Non-techy folk beware, however. Studio II's manual claims that this package is very simple to use, but a reasonable amount of experience is presumed. The documentation itself, for example, is extensively detailed but rather intimidating and confusing in its layout. It's not until page 111 that we finally get 'Studio for Beginners,' and if you're expecting the kind of walk through a company like Softwood would give, you can forget it.

Installing the program initially looks simple thanks to the fact that Studio uses the Commodore installer program. However, it's a lengthy process with many more menus to choose from, so a step-by-step guide would have been much appreciated.

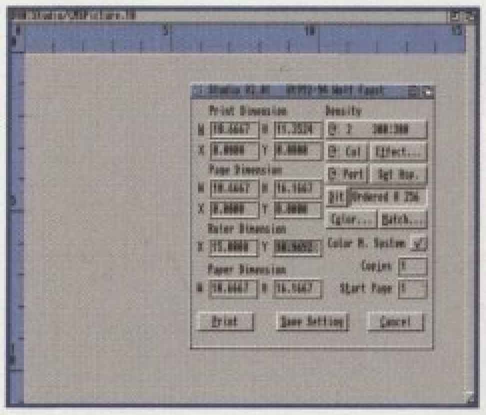
CONFIDENCE

It would seem, then, that this package is most useful for the more professional user who already has a lot of confidence with the printer basics. If you happen to be one of this elite crew, though, it's only fair to say that Studio II has a lot to offer.

Studio is divided into two parts, the first being a collection of Workbench printer drivers for virtually all printers currently on the market. They do have a slight edge over the standard drivers thanks to the fact that they allow users to make adjustments to colour, greyscale, dithering, density and resolution.

To ensure the package is kept up to date with new printer hardware releases, the makers of Studio have conferred confidentially with printer manufacturers. This means that unique drivers are developed before many printers are actually released, and in this version Epson ESC/P2, Canon BJ and BJC printers have been catered for.

The second part of the package consists of a picture printing program. The advantage offered by this software is that it can print most types of pictures without using up to much memory – in fact it will even print poster-sized images spread over multiple pages without having to load the entire picture into memory.



Print Studio's background window gives you an overview of the printing size and positioning, while the interface provides all the necessary gadgets.

An additional piece of software allows images to be printed directly from disk in either 8-bit or 24-bit precision, an advantage gained from the fact that the program is not limited to the 4096 colours of the Workbench device.

The big development for this version, however, is in the introduction of the first professional colour management system (CMS) to appear for the Amiga. A definite boon for the user with serious printing requirements, this system ensures that the printer colours match the ones you're looking at on-screen. All parameters for the CMS can be adjusted, and it avoids the need for expensive printer profiles or phosphor-type files. What's more, CMS can be adjusted automatically to your printer using a scanner calibration tool, and an extensive list of monitor drivers has been added to ensure the screen is showing the colours and definition of a picture correctly.

The range of dither types has been expanded impressively for this version with a choice of 54 to choose from. The speed and quality of these processes is creditable, and the option for previewing selected dither types is an additional time saver. Other image enhancements include blur, sharpen, automatic contrast, enhancement, mirror and inversion effects.

A smooth print spooler has also been included which enables a print job to be processed, and at the same time allows the user to perform another task on the Amiga.

AC

Verdict

I suspect the demand for a product like this is going to be limited. Most people are happy if they can get their printers churning out reasonable results, and they are unlikely to plough through this daunting piece of software for the sake of tweaking things to perfection.

More could have been done to make the program accessible to a wider range of users by providing a tutorial or on-line help. As it stands, those who are already struggling with their printers should ignore the high overall mark this product obtained.

On the other hand, for anyone who feels really professional results are necessary, this package is certainly worth a look. Used correctly, Studio can make a significant improvement on the output of your applications, whether they use the Workbench printing system or otherwise.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

Workbench: 2.02 / 2.1 / 3.1+
RAM: 1 Mb

The bottom line

Product: Studio Professional II
Price: £49.99
Supplier: JAM
Tel: 01895 274449

Ease of use	**6**
Implementation	**8**
Value for money	**8**
Overall	**8**

Rips, rolls, and

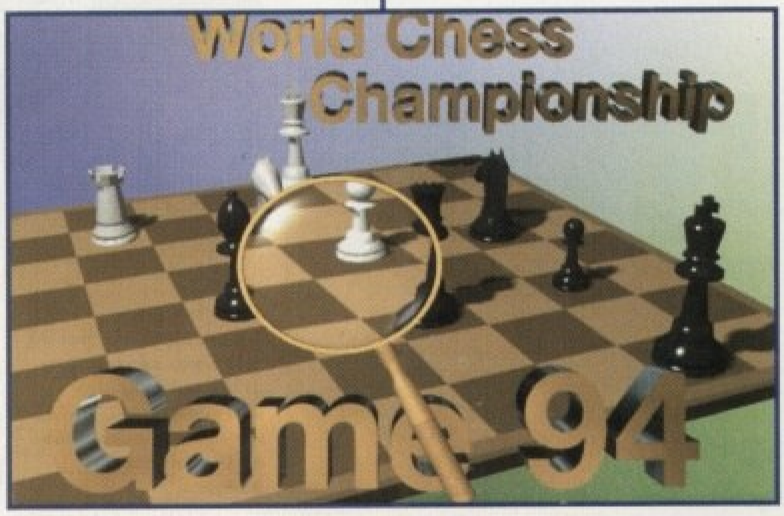
Stevie Kennedy gives his graphics a glitzy new look with the latest starry-eyed Lightwave add-on, Hollywood FX

Your average video presentation is just that – average. Add a few special effects, though, and even a dull piece of footage can be completely transformed. Digital Video Effects (DVEs), best known for those wacky cascades and tumbling flips used in American sportscasts, are the best way to do this, and Synergy's Hollywood FX offers just about the best solution I've seen on the Amiga to date.

When added in a professional video suit using real-time processors, DVEs are very expensive, and until now the home or semi-pro user of Lightwave has only been able to dream about page flips, scroll wipes, shatters, and so on. The effects supplied with the full-blown Video Toaster are okay as far as they go, but they are nothing like as good as the 24-bit animated effects possible with Hollywood FX. By offering a slower approach which doesn't scrimp on quality, the program does the same job as professional kit but at a much lower price.

The program has a simple method of working. Using Lightwave as a rendering engine, Hollywood FX (HFX) passes its own objects and scene information to the Layout screen and renders the effects in the same way any other scene would be produced. The difference is that everything is automatic and the user need only specify which images or sequences are to be included in the effect, then click a few buttons and pop out for a cup of tea while the DVE animation renders.

There are 48 effects in all, and the variety of choice is enough to keep most videographers and animators happy. Simple DVEs used as transitions can start with the bog-standard horizontal wipe where an image slides smoothly away to reveal another, or can be as complex as the gallery effect.



In this effect, a magnifying glass flits across the background image before another image is zoomed into the screen. All refraction effects are taken care of by Hollywood FX

This involves mapping images onto two picture frames in a Lightwave generated room, then zooming out, panning across, and zooming back in on the second image as it sits in its frame on the opposite wall. If you're lucky enough to have a PAR card or another high-speed digitiser, these images can be replaced with captured video sequences to produce stunning transitions from one video source to the next.

In about half of the DVEs, transition from one image to another is the preferred method, but there are many which use just one image on a background. Users can select another image or sequence for the background, a definable gradient, or a solid colour for keying live video at a later stage. Both black (luma) and blue (chroma) keying are supported as standard.

CONTROL METHODS

As with most Lightwave add-on software, HFX controls the main program through its ARexx port, and this makes it possible for the package to oversee most aspects of rendering. From a series of simple on-screen buttons, the user can select everything from image resolution to anti-aliasing, output file directory, and backdrop colour – almost everything, in fact, you'd normally set using the Layout option panels.

The options button, for example, opens a screen which offers the anti-aliasing setting along with toggle buttons for depth of field, motion blur, and ray tracing. Throw in the ability to set field rendering to on or off, adjust the sample threshold for images, and the option to render to DV1 and you have a pretty comprehensive list.

In a clever move, the program will only offer shadowing options (map or ray trace) when you have selected one of the DVEs which uses shadows as part of its effect. Those which do use shadowing really shine when a final animation is played. Not only do you get smooth 3D effects moving across your background video source or animation, that same 3D effect casts shadows which lend the effect a real depth

To enable the best possible control over final image appearance, the images option screen gives the user the ability to adjust many of the surface properties of the objects to which images will be mapped. Luminosity, transparency and specularity are all there, which means there is no need to go into Lightwave to set these up for the final render.

This is just as well, because HFX creates its scenes only after the user decides to start rendering, and clears them once rendering is complete or if it is interrupted. Whether this is a way of stopping people

Who needs 'em?

Digital Video Effects probably seem like an expensive luxury, but if you think they are less than absolutely essential to modern video editing, then think again. Fair enough, some of the more outlandish effects used on cable TV or sportscasts would be out of place in a more sober production, but watch the BBC or ITV if you want examples of DVEs blending in with the surrounding video.

They have become so much a part of modern videography that a video which doesn't use them these days looks dowdy and bleak. Edits can appear clunky and over-abrupt, transitions too squared off, and the whole production suffers. Over-use can lead to silly extravagances, of course, but try a super-smooth wipe with feathered edges just once and you'll be hooked for good.

Of course, you can create DVEs yourself by building objects, experimenting with flight paths, and spending hours or days trying to get the effect just right, but it's very unlikely you'll match the more complex effects found in HFX. Many of them use pages which roll up like wallpaper, or crumple, shatter, and explode, and I for one would run out of patience long before I got close to some of these effects using Lightwave.

A closer look

Here's a small selection of the superb effects offered by Hollywood FX. Remember – there are 48 in all, and more planned for release. We couldn't bring you rendered images from every single DVE, but this random selection should be enough to whet the videographer's appetite.



48 Hours – starts by showing one image, then pulls away to reveal it is actually in the camcorder's viewfinder, and finally rotates the camcorder and zooms into a second image pasted onto the lens

razzmatazz





The breaking glass DVE shatters one image, and as the pieces fall away another is revealed. Adding a sound sample would really bring this one to life



A simple effect but excellent to watch, HFX just cuts the foreground image in two and the pieces fall off the bottom of the screen

nicking the objects and scenes for other uses is debatable, but it does highlight one weakness in the package.

Altering the speed at which an entire DVE plays is easy enough, because one need only make it render more frames (you can set each to take as many frames as it likes), but there is no way to edit how objects work within the effect itself. To take an example, there is a DVE which spins two images into the screen one after the other, but the user has no control over individual image speed or rotation.

Some sort of envelope control would have given the package a huge flexibility boost, but given Synergy's plans to release a Hollywood FX Designer and libraries of DVEs for use in the package, the omission would seem a deliberate commercial tactic. Never mind – plenty of DVEs are supplied with the package and most of them are stunning.

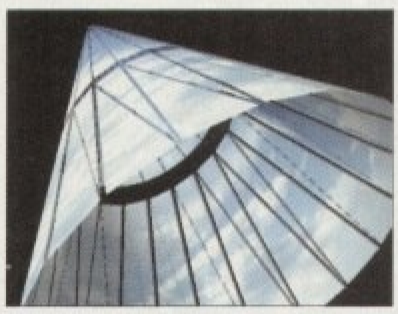
For owners of ADPro 2.5, the package is supplied with macros to make use of that package's excellent image processing functions. Pre-written macros include one for the oil painting effect and one for embossing, but as they are all well commented it is easy to edit the scripts in a text editor to use other effects such as swirl or ripple for truly amazing combinations.

The effect gained when you add such an image processing trick to an already slick animated transition has to be seen to be believed. I was unable to make the program live up to its promise that it would load ADPro and use its operators on frames as they were rendered (a possible bug there, guys), but the 48th and final DVE is a simple post-production button which will load and process the frames you have just rendered, so the feature can be made to work eventually.

As HFX will also take advantage of the PAR card, those with high-end video setups can integrate the package with their expensive equipment, and if you're serious about creating video animations or other productions using Lightwave, you should get your hands on Hollywood FX as soon as possible. Forget the Toaster's own DVEs and start using some seriously smooth movers.



Gizmo – two images are stored on either side of a screen which splits and rotates in the middle of a complex gyroscope-like object



Cone burst– a full-screen image wraps itself into a cone, rotates, then explodes into pieces



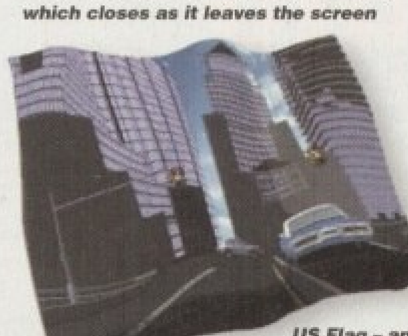
Closing box – a full-screen image zooms out to reveal that it is an image pasted onto the sides of a box, which closes as it leaves the screen



Large cylinder – an image enters from the left of the screen mapped onto a cylinder, then gradually unwraps to paste itself across the full screen



Party vortex – a full-screen image dissolves into small squares, which then swirl and spin out of the lower left edge



US Flag – an image is wrapped onto a flag, which moves away from the camera, waving in the breeze as it goes

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

Lightwave 3D | 8 Mb RAM | 2 Mb Chip RAM

Kickstart 2.04 | 16 Mb RAM

The bottom line

Supplier: Premier Vision
Price: £199
Phone: 0171 721 7050

Ease of use	**9**
Implementation	**9**
Value for money	**9**
Overall	**9**



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First base

Following last month's review of Digita's offering, Gareth Lofthouse now assesses the strengths of Final Data

For months the Amiga press has been raving on about the virtues of the Video Toaster, the awesome power of Lightwave or, more recently, the formidable artistic potential of Photogenics. This is the glamorous side of the Amiga, and it's not surprising if the enthusiasts want to drool.

But while everyone goes dewy eyed and thinks of all the hidden creative talents soon to be unleashed into their computer, it's easy to forget what these handy machines are primarily designed for.

Yes, no matter how good the database is, it cannot help but look rather humble in comparison to the darlings of the Amiga world. To be frank, the prospect of having to review such a package is enough to have anyone muttering bitterly and feeling much put-upon. But of one thing I am sure: the dull database will be ten times more useful to the average user than the likes of Lightwave will ever be.

The database hails from a period when computers were supposed to free up our time rather than consume it. Like your washing machine, they perform a job which is deadly boring, but then that's what makes them all the more invaluable.

So how does Softwood's effort compare with Digita's Datastore? The first thing to notice is that Final Data is nowhere near as posh when it comes to outward appearances. Digita have applied the same approach as they did with Wordworth, which means there's a very flashy front-end to view.

DULL INTERFACE

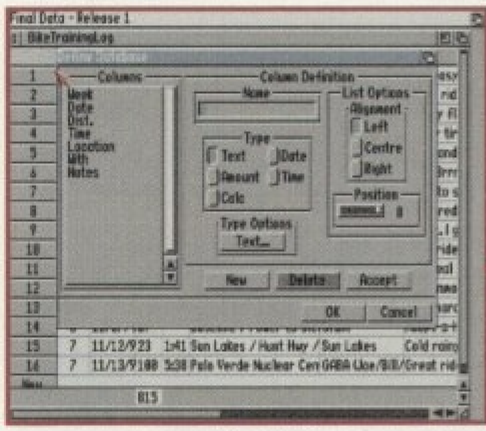
By comparison Final Data looks rather drab, with an interface borrowed from your standard spreadsheet. There are no pretty icons and you can't import pictures to grace your files with a splash of colour. But then who cares? Of course it's important to have powerful page-design tools in a word processor, but who wants to waste time and memory space tarting up a list of names and telephone numbers.

Final Data may be more modest superficially, but when it comes to the organisation and sorting of information it has a number of strengths. Softwood's aim in keeping the software bare and simple has been to maximise speed, both in terms of ease of use and efficiency.

When it comes to learning how to use the system, we expect good documentation from Softwood and once again this is no disappointment. Experienced users might find parts of it almost too thorough, but for the less confident the step-by-step guide should prove foolproof.



The Final Data interface – enough to get anyone salivating



The requester is a quick but flexible way of developing a new database

For those of you with particularly large records to keep, it's good to know that the number of rows and columns is unlimited. What's more, columns can be resized using a quick point and drag method.

Data is entered into cells in a similar manner to entering data into a word processor, and the program verifies that the information given for each cell is consistent with the type of information expected. For example, entering an invalid date would result in an error message being displayed.

Simple arithmetical calculations can be performed including adding, subtraction, multiplication and dividing. Parenthesis can be used in complex calculations involving, for example, ((Hours * Rate) + (Bonus))*Days Worked.

OUTPUT

Printing is relatively speedy thanks to the fact that Final Data uses a printer's built-in fonts as opposed to any outline fonts. This can have the added advantage of making printouts more readable.

A rewarding feature for owners of Softwood word processors is the fact that Final Data is ideal for managing lists that are to be used with the Final Writer or Final Copy's 'Print Merge' facility. The database automatically works out how an ASCII file is going to be saved for conversion when you select which word processor to use.

The advantage of storing information on the computer is that the required data can be recalled in much less time than it would take to search your filing cabinet. A database's sorting powers are therefore all important, and fortunately Final Data is better than most thanks to a *search and replace all* feature that they claim is unique.

Like all good utilities, Final Data supports ARexx, the Amiga's inter-program language. ARexx programmers have 75 commands at their disposal to develop their own scripts, but for those of us who are uninitiated into the mysteries of this language, several predesigned scripts are included in the package.

Verdict

Unless train spotting is in your blood, the less time you have to spend on a database the better. A good program should be easy to learn, fast and efficient in use, and powerful in its organisational tools.

Final Data has no frills to trick you into thinking you're having fun, but happily it does have the power to do what a computer should do by saving valuable time on your paper work. What's more, at half the price of Digita's offering, it's a choice the bank manager would approve of.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

1.3 Workbench
2.0+ Workbench

The bottom line

Product: Final Data
Supplier: Softwood
Price: £39.95
Tel: 01 773 836781

Ease of use	9
Implementation	8
Value for money	9
Overall	9

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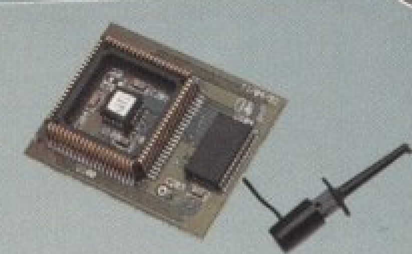
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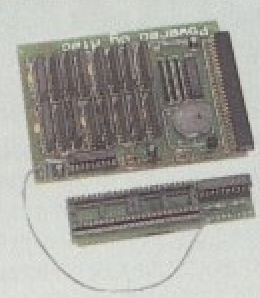
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System Requirements
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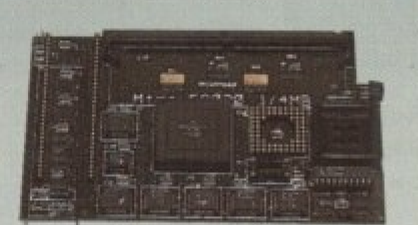


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Power 500

With Amiga technology forever improving in speed and spec, what can the humble 500 owner do to inject a new lease of life in to their well used machine? Adam Phillips reviews

While Commodore's future remains unresolved, third-party developers are still producing innovations and improvements for high-end Amiga users – the likes of the Warp Engine, Cyberstorm 060 and other assorted technical goodies are plentiful for 4000s and, in some cases, for 1200 owners as well.

But let's not forget about the punters who helped start the Amiga legacy – the 500 and 500 plus owners. By today's standards, these machines are the most basic around. However, because money doesn't grow on trees and not everyone can cough up large amounts of cash for a 4000 (if they can find one at the moment), the 500 still has enough peripherals to give more power to your elbow.

What follows are three pieces of hardware that can do just that. Any serious 500 user should give each consideration, to make sure that their machine doesn't become redundant over the following year.

M-Tec Hardware Design AT500 (Size: 360 Mb)

Hard drives are essential for any real kind of data storage. Floppies are fine for transporting data from one machine to another but, for ease of use, reliability and above all, speed, a hard drive has to be near the top of any Amiga owner's shopping list.

Coming in various memory sizes, many programs can be installed to the hard drive and simply double-clicked on to load. No tedious disk swapping or lengthy waits as the program boots up. For 500 owners, the AT500, while not exactly what you'd call eye grabbing, is a very efficient piece of kit.

The unit plugs into the sidecar expansion slot on the 500 and has two simple buttons on the front, along with two LED lights that indicate when the drive is on and when it is being used.

Coming preformatted, the hard drive shouldn't cause any problems when being set up. Plug the unit in, turn on the 500 with Workbench 1.2 or above in the floppy, and switch on the hard drive.

The HD's management system is provided on an accompanying disk. There are three programs to help install, check and configure the HD. The main software is the installer where, by using a simple set of options, the user can pretty much create whatever he or she needs.

Different partitions can be created, each using a certain amount of memory from the hard drive, and any faults can be checked. Once you're happy with all the options, simply click on the proceed button. During this period, Workbench can be installed onto the HD.

Be warned though – once all the partitions have been set up, if you should decide to change them, use the delete partitions option, not the low level format. One, it takes four hours to do and, two, the hard drive won't work properly without being returned to the suppliers.

The best advice is to never use the format option unless you're at your wit's end and, for setting up your hard drive in the first place, think which partition you want to boot up from and give that partition the most memory. The simple reason for this is that you'll spend less time in Shell sorting out fiddly assign routines.

If you want to avoid all this hassle, simply preorder how you want the hard drive to be set up and the suppliers will do it for you.

Also included on disk is the DPU software. This allows the user to select a device and see how its working, where the memory is allocated in each partition via a bit map analysis, and gives the option to check for corrupt cylinders.

There were no instructions included for the actual hard drive but each program on the floppy comes with its own read.me file or there is on-screen help when you're using a particular piece of software. I'd still prefer a fully comprehensive manual though, covering all aspects of the package in one booklet. Power Computing has said they'll put in an advice slip for newcomers, listing the do's and don'ts of hard drive 'etiquette.'

Apart from my formatting problem though, it has to be said that this is a good piece of kit with fast access times and causes a minimum of fuss to be installed on a 500 or 500 plus. A good start for anyone who needs a large amount of data, primed and ready for easy use and access.



The Nora Batty of computer peripheral design – but it works and is highly useful for data-hungry users

The bottom line

Product: AT500 Hard Drive
Price: £259.95
Supplier: Power Computing
Tel: 01234 273000

Ease of use	**9**
Implementation	**8**
Value for money	**8**
Overall	**8**

M-Tec 2MB

Once in a while, every user reaches that point where lack of memory in their computer becomes an annoying habit. When using certain files or programs, they rely either partly or exclusively on chip RAM that makes up the core of your machine's memory.

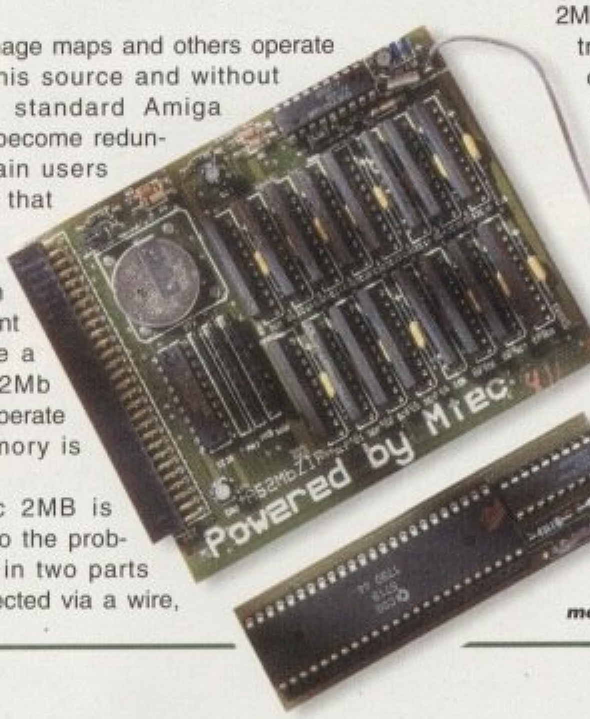
Samples, image maps and others operate solely from this source and without enough, the standard Amiga 500/plus can become redundant for certain users requiring just that little bit more. Also, certain programs such as the excellent Scala require a minimum of 2Mb chip RAM to operate so more memory is essential.

The M-Tec 2MB is one solution to the problem. Coming in two parts that are connected via a wire, the unit is a replacement for the Gary chip which can be found on the 500's circuit board. The actual 2Mb comes on a board that slips into the trapdoor slot. The replacement Gary chip, with its piggyback connector, slots into the Gary slot once the original chip has been removed.

Be careful when slotting the piggyback in because the long, unsupported connectors are very flimsy and have a tendency to bend so they won't fit into their respective holes.

The best way to ensure that each row of pins is suitable to fit on to either side of the Gary slot is to ever-so gently press a row against the side of a desk so they point in a little more. Once done, ease them into their correct position.

Flick the machine on and you'll now have an extra 2Mb sitting there very comfortably in chip RAM. The only thing to make sure of is that when ordering, specify if you have a 500 or 500 plus – they aren't interchangeable.



Scala? Sampling? Image maps? You're going to need extra memory, and a 2Mb upgrade isn't a bad start

The bottom line

Product: M-Tec 2 meg upgrade
Price: £89.95
Supplier: Power Computing
Tel: 01234 273000

Ease of use	**8**
Implementation	**8**
Value for money	**8**
Overall	**8**

M-Tec 68020i

Speed sells computers. You can have the most user friendly machine in the world with all the programs you'll ever need to get the most out of your machine, but there are some out there who will drop everything to lay their hands on a faster processor.

Chances are you won't be one of those – you've still got the 500 or 500 plus. But for those who want to inject a dose of adrenaline into the old hardware, there's no better way than investing in an accelerator card. While the heady heights of the Warp Engine aren't compatible, it is possible to increase the speed of a 500 up to the power of a 1200.

The M-Tec 68020i comes in a black box that contains the hefty accelerator card, a single sheet of rather sad-looking installation instructions and a disk with a set of Turbo Tools on it. Again, it's out with that screwdriver and take the top off the 500/Plus. Whip out the main processor (the 6800) and gently push in the new card.

EARTH TO M-TEC

Before starting on this process, make sure you're 'earthed' properly. The best method is to invest in an earth strap that fits snugly onto the wrist. Available from most electrical stores, it'll stop static from being built up and potentially shorting the chip when you touch it.

Remember to keep your feet in the same position during the whole process as static can be built up there as well and always make sure that the computer is completely disconnected. Finally, if you really are uncertain how to do it, find someone who does and ask them to help.

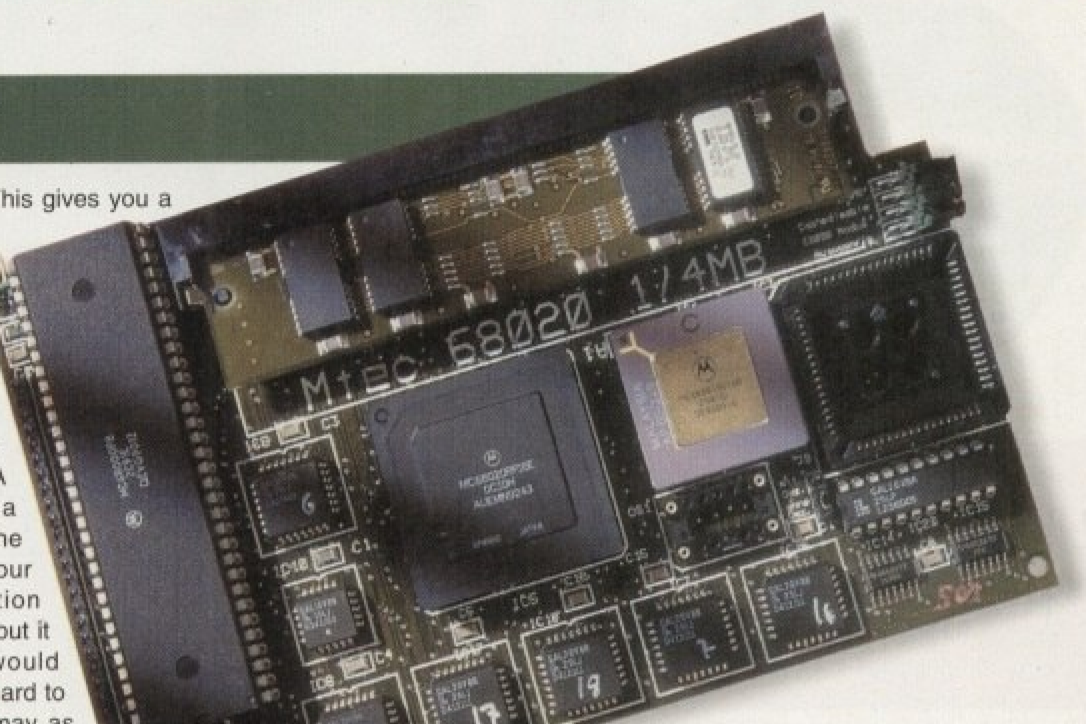
Included as part of this particular card spec is 4Mb of SIMM chips that sit in a slot on the actual card. This gives you a healthy amount of Fast RAM to play with.

While the card is 32-bit and doubles the speed of your machine, don't be mistaken into thinking that it's AGA – you can add a graphics card like the Deac 18 to boost your picture and animation viewing capabilities, but it still isn't AGA. It would take a new motherboard to achieve it and you may as well invest in a 1200.

The card is automatically set-up so that you have all the improved power at your fingertips. If you want to check on the card's specifications though, the disk included has a variety of programs to help make sure it's up and running correctly.

The best utility is Sys.Info which gives a full breakdown of memory, speed charts, operating drive configuration and a host of options. The card itself is of a good standard and if extra power is what you're after, you can hardly go wrong. Unless that is, you're an absolute and utter beginner.

The only real problem is the rather pathetic instructions that come with the hardware – they're just not good enough for a beginner. That aside though, the M-Tec 68020i is a worthwhile investment and should prove a tempting buy to anyone feeling the need for speed.



Give your machine a turbo boost but don't expect AGA

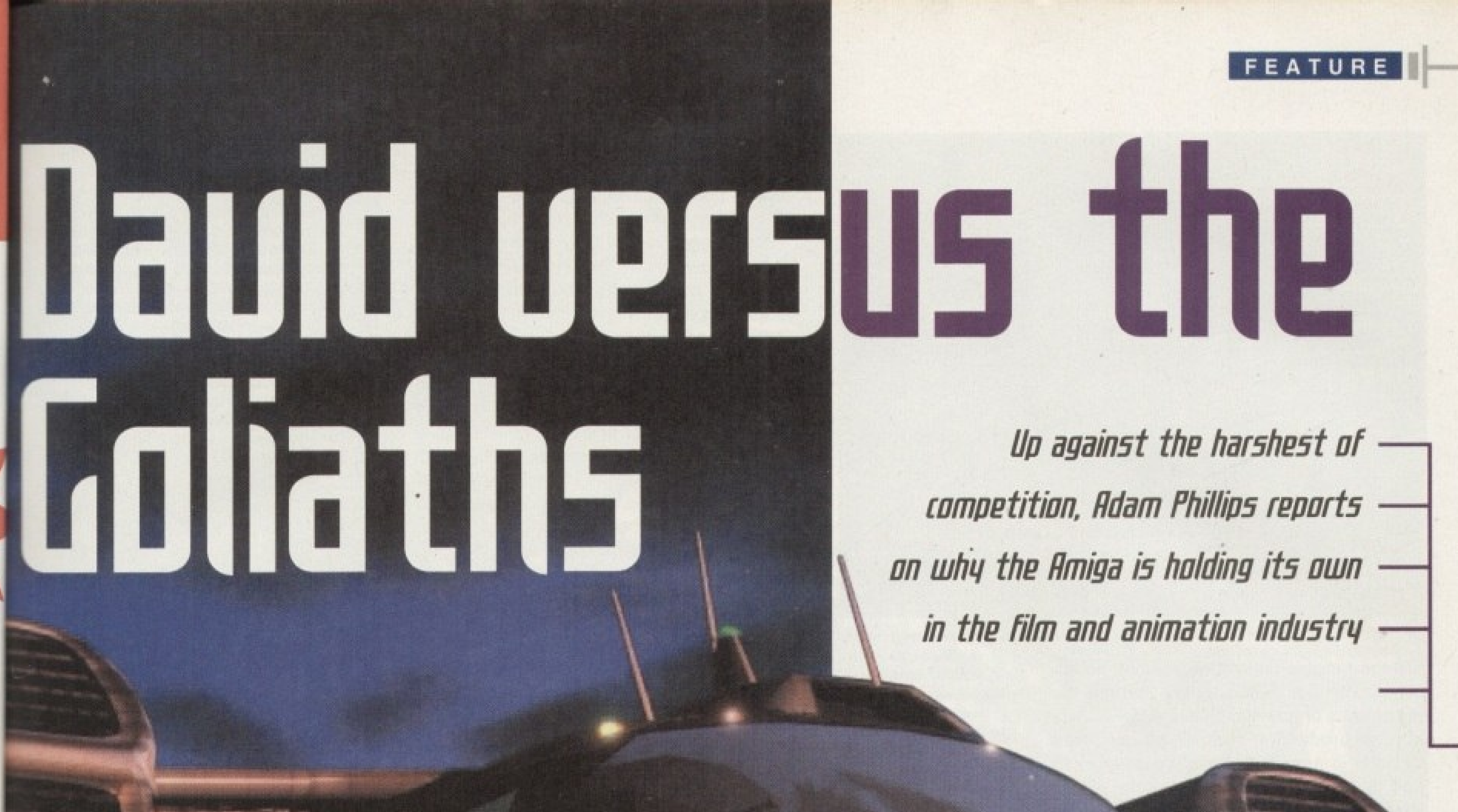
The bottom line

Product: M-Tec 68020i accelerator card
Price: Standalone £99.95
With 4Mb extra RAM
£239.95
Supplier: Power Computing
Tel: 01234 273000

Ease of use	**7**
Implementation	**8**
Value for money	**8**
Overall	**8**

David versus the Goliaths

Up against the harshest of competition, Adam Phillips reports on why the Amiga is holding its own in the film and animation industry



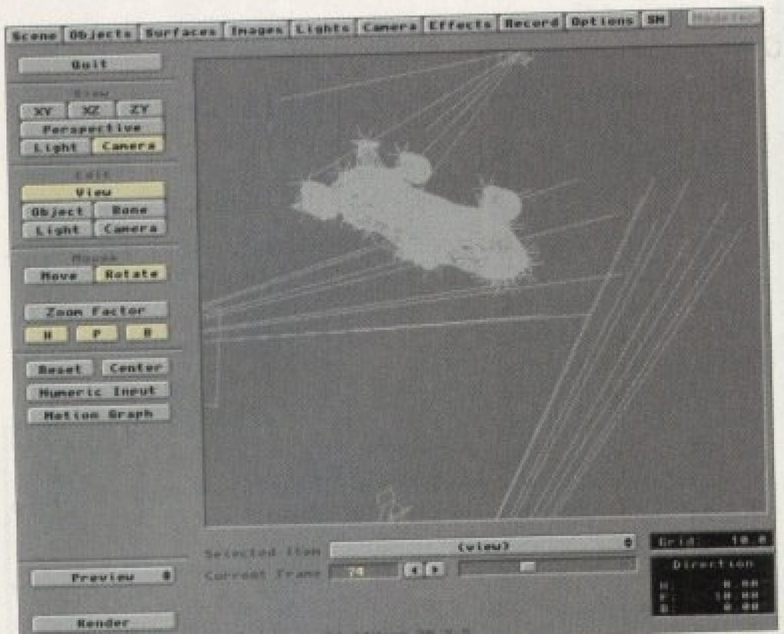
The skybus – created by Evan Davies using Lightwave. It's made up of 1500 polygons, 53 surfaces and 46 lights. It also has 24 frames of a reflective animation map in its windows to give the impression that it's moving through a real landscape

Shepperton Studios. One of the principle organs in the wounded animal that is the British film industry. Recently it hit the headlines with Ridley and Tony Scott, the British-born dynamic directing duo, reaching into their substantial pockets and plucking the heralded studios that have produced some classic movies from the claws of the bank. The studio is now in the best position for a revival it has been in since the early eighties when it was owned by the Lee brothers.

Walking through the studio lot, you can ➤



The distant shot of the bus as it approaches one of the animated billboards of the future created on the Amiga



From panoramic shots to close-ups of the action, computers, especially the Amiga, are taking over the special effects scene

feel the tangible buzz of excitement, adrenalin and long antisocial hours that are the trademarks of any film studio. A filmatic village of production companies clustered together in a melting pot of creativity, cash and egos surrounded by towering stages where scenes from movies have been captured by some of the world's most acclaimed film makers.

Nestled firmly in the comfort that the Scott brothers have potentially made a purchase that could help turn the British film industry round, the Magic Camera Company can look forward to an even brighter future after already producing special effects for films that most cinema goers will have seen – Cape Fear, Cliffhanger and Batman to name but a few.

Currently geared as a production house for both model making, shooting, motion control, matte paintings, opticals and computer graphics creation for film, television and commercials, the success of the company is very much in evidence with the walls of each of its rooms and offices adorned with the posters of previous projects.

While the company was established in the early eighties, it has seen a change of management and it's only been in the last couple of years that the computer side has swung into full action. The man responsible for running the computer graphics department, which has an estimated worth one million pounds, is Alan Marques. Under his wing is a team of five people, three of whom are working at the moment on Gerry Anderson's Space Precinct using Silicon Graphics workstations, and Alan and Evan Davies are working on CyberJack using Amigas and Lightwave.

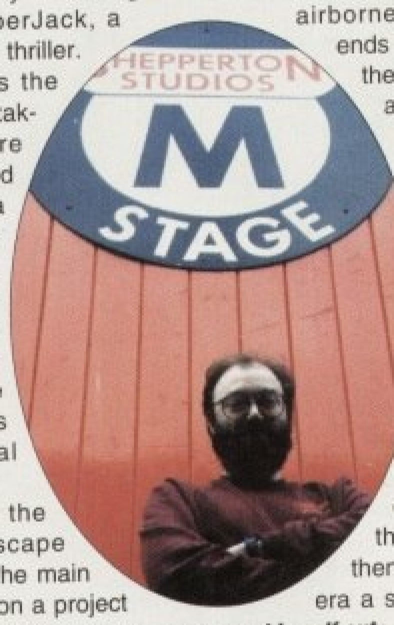
Marques started realising the potential of computer graphics in 1983 when, in his own words, he "came out of film and TV college and wandered into computer graphics purely by accident." Unlike today, where there is support for 3D artists in the form of magazines, videos and seminars, Marques had to teach himself the basic principles, focusing his time on programming and producing wireframe graphics – powerful, affordable kit wasn't an option in those days. "It's only recently that you've been able to walk round with a large cheque saying, I'll have that and I'll have that as well."

After spending nine years working in the West End on various commercials, Marques and his extensive understanding of computer graphics were employed to build up the rather healthy computer suites at the Magic Camera Company.

SPACE ON EARTH

At present the firm is using two studios for its work on Space Precinct, where models of ships and vast cityscapes have been constructed to recreate the bleak future of Demeter City. Housed in the offices is a computer setup that would send most 3Dphiles into embarrassing spasms of excitement on the cutting room floor. Seven SGIs with various software licenses make up the mainstay of the company's hardware, but in a separate office across a hall sit three Amigas at the cutting edge of film special effects.

The film that's currently receiving the Amiga treatment is CyberJack, a Canadian $2 million sci-fi thriller. Set in the future, it tells the story of a renegade cop taking on terrorists who are intent of ridding the world of computers by using a virus. With the live action already in the can, the Amiga and Lightwave are being used to add the post-production special effects under the supervision of Angus Bickerton, the Visual Effects Supervisor.



The man, Marques, himself outside the stage that holds various sets from the up-and-coming Space Precinct series

Mixing live action in the shape of a model cityscape and computer graphics, the main task of any 3D animator on a project such as this is to make sure everything fits together seamlessly. In a professional's eyes, as soon as a viewer realises they're watching computer graphics matted over a live action backdrop, then they have failed.

When I turned up on their doorstep, Marques and his colleagues were busy at work on the introduction scene. Set over several shots, the intro consists of a Skybus – a futuristic flying bus designed by Davies that has 15000 polygons, 53 surfaces and 46 lights on it – heading towards a futuristic city and then beginning to lose control as the terrorist virus kicks in. The airborne public transporter finally ends its flight by nose-diving in to the side of a skyscraper, killing all the passengers.

One of the most impressive shots is the skybus flying only a few feet above a crowded street as it struggles to gain control, mixing live action of the street model and the Amiga-rendered skybus. To produce such a convincing end piece has taken a month of work.

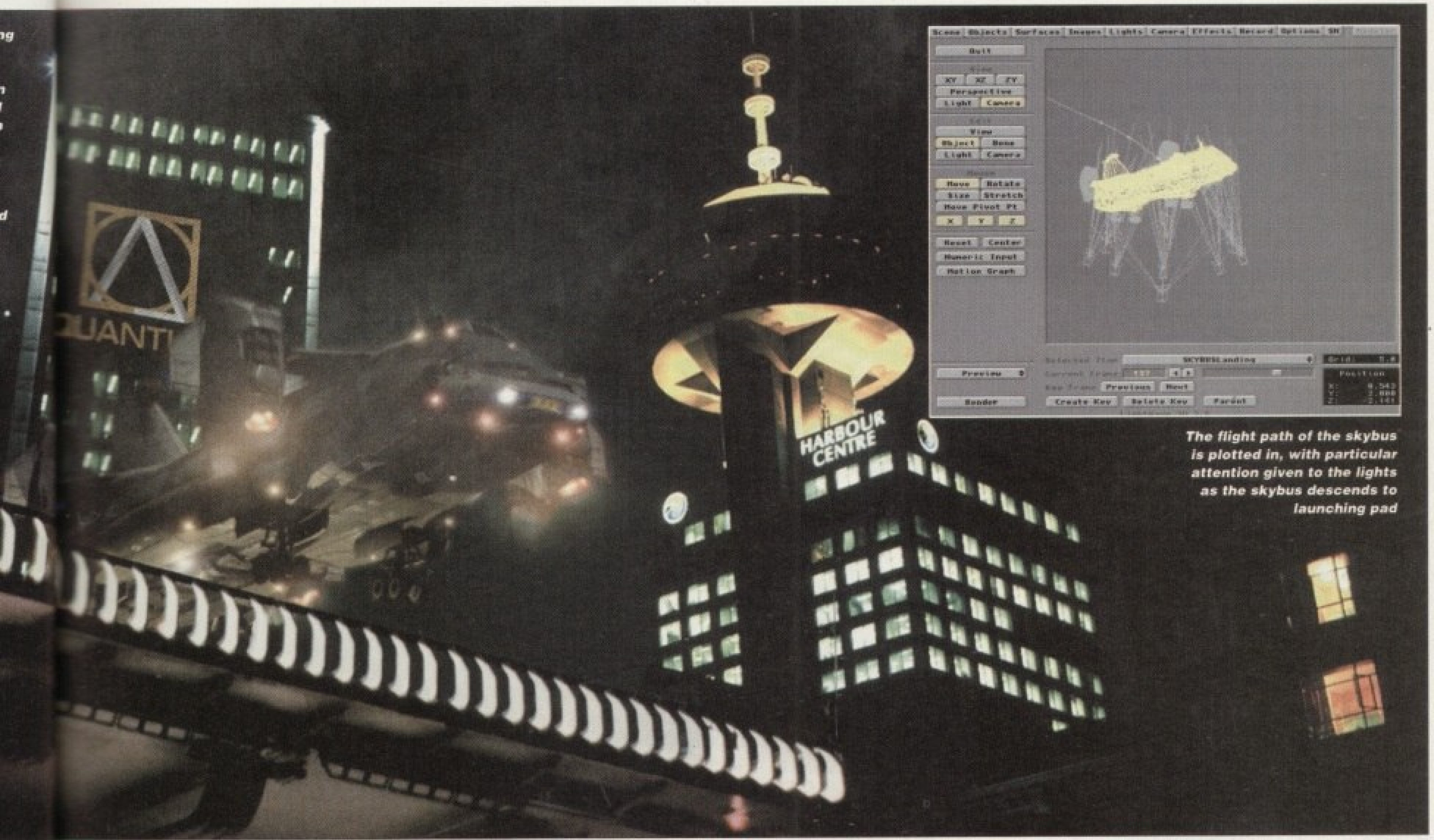
Before any graphics could be plotted the set for the street had to be built, and then using a motion control camera a shot was filmed as if following the imaginary craft through the cityscape. This film is developed, viewed to see if the animator's intentions will work, and then taken to the scan room. In this black coffin-like room the film is projected onto a $70,000 liquid cooled chip camera to produce a 2,000 pixel resolution series of frames that are downloaded onto



This scene shows the skybus coming into land at the local bus port. The image is made up from several elements: The two main buildings in the background were photographed separately in Toronto, Canada, then cut out and placed in the picture together. The landing pad was built on the Magic Camera Company's stage and filmed. As a finishing touch, an Amiga sign was generated on the building directly behind the public transporter. The computer generated skybus was then composited on to create the final image.



Notice the amount of lights poking from various places on the hull of the public transporter – it's taken a month to create the final object



The flight path of the skybus is plotted in, with particular attention given to the lights as the skybus descends to launching pad

a 256 meg Silicon Graphics Indigo machine.

Because of Marques staunch belief in networking, the files are saved to a 16 gigabyte hard drive where all the computers in the Magic Camera Company setup can access them via Ethernet.

Once the film has been digitally scanned, the skybus could begin to be applied. The first problem, before any plotting of the object's course through the live action could be started, was how well the highly polished graphics in the foreground fitted in with the background of the film. "The one thing you have to do with computer graphics is put grain on them. When it comes out of a machine the image is very sharp and very clean. Film isn't like that, it's grainy so you have to put that over the computer graphics. If you don't it shows up like a sore thumb."

When the skybus was rendered at 2048 pixels, the same resolution as the background, the image was too sharp. So it was decided to render the object at half that resolution and blow the finished result up to 2048 pixels. This, in turn, softened the image and reduced renderings times dramatically as well. A very mild soft filter was then run on it and took the edge off even further. Marques then punched a film grain onto it using a holdout matte.

> People dont appreciate what you have to do to get the graphic to look real
>
> *Alan Marques on one of the bugbears of being a professional animator*

One of Lightwave's present shortcomings also cropped up in the process. When the program creates an Alpha matte it leaves one or many of the lights out. A black and white matte of the Skybus from each frame had to be created and then mixed in with the colour image to produce the fully lit object.

REALISTIC EFFECTS

To round the proceedings off, film grain noise was added to give that final tint of realism. The process is a long and sometimes tortuous one but Marques is adamant: "People don't appreciate what you have to do to get the thing to look real. We spent three weeks painting textures for that bus – we have to do that to get it right."

To actually animate the skybus into the background they had to overcome another hurdle associated with Lightwave. Unlike Wavefront where video or animation can be played automatically into the wireframe animation area to synchronise the action easily, Lightwave doesn't offer this feature. Instead, he's created a macro for Lightwave which converts the film footage and ➤

The cutting edge

With the latest in graphic engines only a few steps away across the Special FX office, it may seem strange to use the Amiga which is a fifth of the price and, at the end of the day, doesn't have the same image in the industry's eyes as SGIs. Marques filled me in: "When we came to this job we went through three software packages before ending up using the Amiga. We started off trying to do it on Wavefront, one of the big Silicon Graphics rendering packages (£40,000 worth) but when it came to doing CyberJack, we just couldn't get a real look out of it."

While Marques enthuses about the merits of SGIs for doing glossy objects such as cars, when it comes to that grungy, well-used look, the expensive system would appear not to be able to cut the mustard due to its lack of appropriate rendering capabilities.

Marques and the team then moved onto another package to see if it would yield better results. "We then tried Explore which has an outstanding renderer but, unfortunately, the interface is just ridiculous – it's such a complex affair. I spent the weekend on it and just gave up." Next up was a Canadian package he used during his days in the West End, and is an excellent renderer too. Again, there was another hitch. "It worked beautifully on the rendering side but the problem was that the 3D models wouldn't come out clean. They came in with bad polygons and flipped into the wrong position."

Finally, he started to produce test renders on the Amiga and knew that he could get the look he needed from Lightwave. There was a brief stumbling block though – at the time, each frame was taking an hour to render which simply wasn't up to speed. However, Marques had heard through John Allardice at Team 17 about the Raptor Plus, the accelerator animal from Deskstation Technology in the US, and went along to the World Of Amiga Show last year. Being part of a financially successful company with deep pockets, he was able to buy one on the day and take it home that evening.

With the rendering times down to four minutes a frame, the Amiga was chosen to produce the special effects.

compresses it down to video resolution. This in turn is DVEd to fill the Lightwave anim area and is then written onto the PARcard on another Amiga via the Ethernet.

"This all means we can play the PARcard on one machine which plays directly onto the background of Lightwave's anim area on the other via a G2 Genlock." Said Marques. He hopes that Lightwave 4 will remove this long-winded process.

The end results of composited film speak for themselves – the Skybus streaks down the street, the lights of the cityscape cast their beams against the dirty metal of the public transporter, all culminating in an explosion lifted from their extensive library of pyrotechnics.

The kit required to pull most of this visual glory together mainly consists of two Amigas – one is a 4000 040 with a Warp Engine, 146 megs of RAM and a soon-to-be added two gig drive. Also included are two Ethernet cards, one of which communicates with the Raptor Plus and Screamernet, while the other deals with the outside network connected to SGIs and so on.

The other Amiga, a 1500, has a GVP 40 MHz 040 combo card, a two gig hard drive, 16Mb of RAM, a GVP, Ethernet and Picasso cards, a SyQuest drive and the full PARcard kit. Marques is extremely impressed with the latter.

Ultimately, he believes the Amiga has a vital role to play in their production process – the machine is consistently being used to create objects before they are ported across to the SGIs. "We'll never get rid of the Amigas because they are very useful – they're cheap platforms that don't tie up an expensive SGI station... I'm still a great believer in mixed technology and the Amiga is still a very good machine. It's the only machine that multitasks well to this day. I like the fact that with 146Mb I can have Lightwave, AdPro and a paint package running and Ethernet doing

Mu-Media

Appearances can be deceptive. On the London A-Z, the layout of Kensal Road suggests that it might be a rundown part of the Big Smoke that can only boast a series of council houses built at some point in the late forties. Arriving there, however, you are confronted with courier bikes roaring past you to their urgent mystery destinations, and a sizeable chunk of production companies, graphic design firms and games houses that must form a fair part of London's media circus.

On one of the floors of one of the large buildings that line either side of the street are the offices of Think, a ground-breaking graphic design firm headed by artist Andrew Sutton which has produced some of the most critically acclaimed album covers in the last ten years for bands such as Primal Scream, Spiritualised and Teenage Fan Club. Across the office in a separate room, the Mu-Media suite sits with its Betacam editing suite, two copies of Lightwave, two Amigas and a enviable amount of Amiga-specific software and hardware any self respecting film and graphics company needs.

One of the great untold Amiga success stories, the firm was set up while its two founders and now managing directors, Kieran Evans (25) and Tim Davies (28), worked at Amblimation, part of the Amblin company owned by one Steven Spielberg. Six months before they decided to leave, Mu-Media was set up to explore the moving image makers' particular interests in the industry – mainly music videos.

Evans commented: "At the time, I was into the KLF (the now defunct dance group) and liked their mad videos which showed the bands as mysterious figures. So we decided to do spoofs on that kind of theme in the form of mad little films that leave the viewer with open-ended questions."

While the two self-financed their experimental movies, a twist of fate landed Evans with an opportunity to get in contact with an up-and-coming pop group called The Grid. After writing to the band and being given VIP treatment at a concert, Evans was sent a newsletter by Richard Norris, a member of the band, inviting him to join The Grid network, their fan club.

"At the bottom of the letter, we asked if they would like to see some of the films we'd done. The reply was yes" explained Evans. "We sent Norris a tape and he subsequently went off to Thailand for four weeks, then returned and immediately gave us a call saying he wanted us to do The Grid live show."

CHART-TOPPING

For the show, Evans and Davies used two Amiga 500s and a Panasonic mixing desk to aid the band's aural experience, with a visual side to match. Since then, The Grid has stormed the charts and Mu-Media have permanently become the band's pop promo makers.

With their foot in the door, more job offers began to come in and, after shooting a video for The Grid's 'Texas Cowboys', Mu-Media were approached by RCA records. The men in suits were holding a conference and wanted an interactive edge to the proceedings to help convey to their marketing people info about RCA's stable of bands. "We told them that we couldn't do it unless they bought us a computer, which they subsequently did." That computer was their 'grandaddy' machine , an Amiga 4000/040.

"We had a load of televisions set up and there was two and half hours worth of information such as pictures, animations and so on which are all controlled via Scala and AdPro" said Evans. They also directed a video for RCA which was intended to be the main focus of the conference.

Their successful rise in the pop promo scene has continued, working for bands and DJs such as Paul Oakenfold, Lionrock, Sasha and Mr Roy, and Mu-Media's hardware list has swelled into a enviable collection. With another Amiga 4000/040, each machine is fitted with a DPS Personal Animation Recorder, a Warp engine, Lightwave, Scala, AdPro and other familiar high-calibre packages.

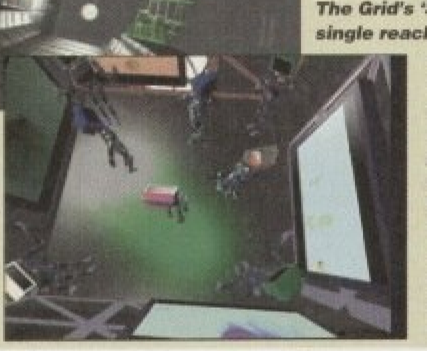
The results of their computer-slanted work is obvious. The Grid's 'Swamp Thing', which reached No.3 in the charts, featured large animated sections rendered in Imagine (before Lightwave became available) and subsequent videos now use NewTek's software, where the viewer shoots along a rollercoaster, and a lens flared sheriff's badge spins abstractly in The Grid's 'Texas Cowboys.'

The reasons for using the Amiga are numerous. The most immediate response is that the machine is highly cost effective – you can obtain professional results at a fraction of the price you would pay for the likes of a Silicon Graphics machine. As well as technically being a high calibre computer, Evans sees hardware such as the PARcard as a creative tool.

"It can be used as a video scratcher much in the

The Grid Collection





The Grid's 'Swamp Thing' single reached No.3 in the UK charts and during one week on French television it was played 35 times. Intercut with live action of the band, the computer graphics were rendered entirely with Imagine



The live action footage for Texas Cowboy was shot on location in Spain. The Lightwave post-production effects were added afterwards and consist of a spinning sheriff's badge and serious amounts of lens flare



Featuring a computer-generated rollercoaster track, a frame of The Grid's aptly named Rollercoaster video was also used to help with the cassette single cover. After being transported across to a Mac, the image was photoshopped and then titles added to create the final cover image

background tasks all at the same time."

And the competition? "Frankly, I would like to do that on a PC or a Mac but the answer is that you're not going to see it because they're just not up to it."

AMIGA–SPECIFIC

As well as CyberJack, you'll also be able to see some of the Amiga's work in Space Precinct, where Lightwave is used to create lens flare, laser beams and other spot effects such as missiles. For those who want to see some of the Amiga's past work, try tracking down the opening to the ill-fated and rather rank TV show, Scavengers – this has been pulled after only one series and one serious amount of money. As you can see and read, while liquidators play corporate chess with the future of Commodore, the real world continues to show the Amiga is still, and will be for sometime, an invaluable tool for professionals across the world.

Insider opinion

With the Amiga playing such a vital role in film and video productions, even after months of bankruptcy, if Amiga International do achieve success, what do the people behind the scenes want to see?

"I'd like to think that there is a future for the Amiga and if they get this RISC machine going, it could be one hell of a machine to have because the next big thing has to be desktop video and [public access] cable. It's already happened in America with the Toaster and that culture will come over here which is potentially very exciting. People aren't going to spend thousands and thousands of pounds on a machine because their production costs are going to be so tight they need a cost effective machine that can do it. The next generation Amiga could be that machine... they need to get a machine out this year though or they'll be dead."

Kieran Evans, Mu-Media.

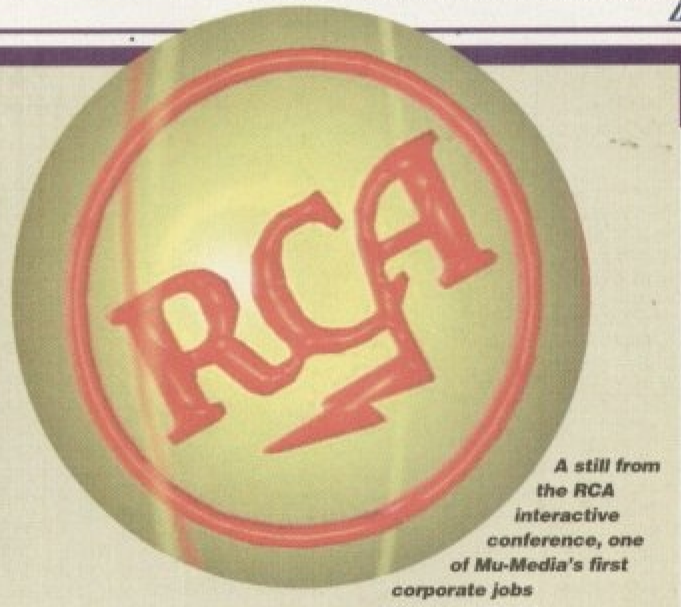
The corporate collection



While not actually designing the logo, Mu-Media were asked to create an intro for a BT video. Because of BT's fierce guarding of their logo, Mu-Media were only allowed to show the logo in the final second of the shot. Subsequently, the action begins inside the logo and pulls out through shooting lights representing information to reveal the BT logo



One of the intros for the Think Designs graphic design firm who Mu-Media work with on many projects



A still from the RCA interactive conference, one of Mu-Media's first corporate jobs

same way a DJ scratches vinyl to produce a score. Before the PARcard arrived, this had to be done on huge video machines – the PARcard makes this much more simple and intuitive with its controls" commented Evans.

Like Alan Marques at the Magic Camera Company, they're also impressed with the Amiga's multi-tasking: "It's excellent the way it can launch five different programs at one time – design on Deluxe Paint, bump it into Imagine, create a 3D object, bump that into Lightwave and then animate it."

PURE AMIGA

Any thoughts of moving onto another platform to do their work is met with a resounding negative: "The Amiga does everything we need... I don't rate the PC – the amount of add-ons you have to go through is very expensive. For instance, the Amiga comes with sound built-in and is much more user friendly to use anyway. With the likes of DPaint, Imagine, AdPro and Lightwave, the stuff we're doing is equal to things that people are doing on Macs and with SGIs."

On the subject of Macs, Evans is adamant: "The Mac's three dimensional programs are cack."

The company doesn't believe in constantly upgrading the machinery. The philosophy is to 'use and abuse' the machinery they have already to the limits, and Evans knows that they're still finding out new things about the Amiga every week – he reckons that no one has yet realised the full potential of Scala.

As far as the Amiga's end results, Evans and co. are very happy. Apparently, a leading figure in the British film industry was bowled over by what he saw the machine do. Last month, Mu-Media were interviewed for French TV and, at the end, they were asked to say a few words in French but abandoned hope when their accents proved to be unintelligible. Instead, they created a Lightwave animation in five minutes and the French crew's jaws fell firmly to the ground at the time the whole process took.

He is very keen to point out, though, that they're not just a graphics company but a full-blown production house which offer a wide range of facilities, with Kieran as the director and Tim as the 3D expert. Their work includes logos for corporations such as British Telecom, and Evans and Davies have major plans for the future. At present they're working with The Grid, Zion Train and possibly the Art Of Noise to produce CD-ROMs boasting 3D graphics, band information and more.

Littering their office walls are storyboards for several other projects as well. Nick and The Glimmung is a children's story written by Philip K Dick which Evans found while hunting through shelves in a local bookstore. The story appealed to him and, after consultation with Richard Williams (the man responsible for animating *Who Framed Roger Rabbit?*), he was encouraged to get some storyboards done and a script together. Since that time, several TV and film companies have become interested in the idea and negotiations are under way to develop the story into either a feature film or TV series.

There are also plans to produce a 45-minute 3D video using Lightwave and a Grid soundtrack. "It's not like the usual moving wallpaper. It's not simply going to be excerpts from the best in 3D graphics – we've actually got a story behind it based in space and round new technologies " commented Evans. "It'll start with a 10-minute live intro to set the story and then the computer starts to trip. That's all I can say."

One of their most exciting projects set for April is an hour-long live show for a French TV channel that produces a six hour rave programme every Saturday night. The audience figures are well over a million and the two Amiga 4000s are being used to produce 'acid head'-style animation.

Ultimately, Mu-Media and their generous neighbours, Think Designs who gave the then budding production company office space for free, plan to join together at some point in the near future to form a company that is known for the moment as simply *A*. To all the parties involved the line between different forms of media is becoming more blurred as graphic designers, computer software producers and video companies begin to work together more and more to create true multiple media projects.

COLLABORATION

An example of this is the Zion Train pop video which combines text animated in Lightwave, graphic-designed interfaces and framing created on a Macintosh. The two companies have already collaborated on album and single covers such as The Grid's 'Evolver,' where a frame of the Lightwave-produced rollercoaster sequence was grabbed with the PARcard and downloaded to a Mac. From there it was altered and manipulated into a cover design for the band's Rollercoaster single.

With this forward thinking attitude to the future, and a company that is literally bursting with ideas, projects and productions, whatever happens to the company's name, I predict we'll be hearing more about Evans, Davies and Sutton's work. And the Amiga's.

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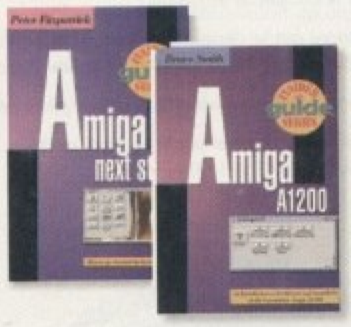
Heimdall II



The follow-up to the classic Viking adventure from Core Design takes you again into Nordic landscape in this arcade adventure and can be yours, absolutely free, when you subscribe.

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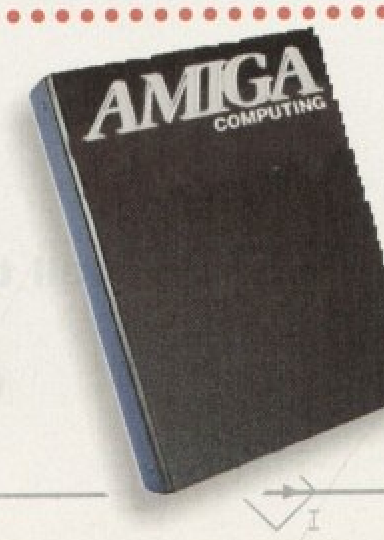


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Commercial surfer

Paul Austin takes to the cyber skies with the aid of AutoPilot

With the massive exposure in the media, you'd imagine the internet was the only way to go global when it comes to electronic communication.

However there are easier, if more expensive methods of getting messages and files across the globe, with by far the most well established and comprehensive commercial comms network of them all being Compuserve.

Unfortunately, as well as offering e-mail on a global scale the system also has a well-deserved reputation as being one of the most expensive e-mail alternatives. Not only do you pay for being a member, you also pay for on-line time plus a surcharge for faxing, telexing and downloading which worst still, becomes more expensive the faster you do it. Even sending messages between other users has a price.

For the most part these additional costs are fairly insignificant, but nevertheless it all adds on to the price of a local call and helps reinforce Compuserve's reputation as the domain of corporate comms.

However, even though on-line charges are a problem, Compuserve offers a unique 'get things done' approach to e-mail. Unlike the internet you don't necessarily need to invest hours browsing around, or even have an e-mail address, to reach the companies, notables or on-line resources you need.

For example, an impressive collection of Amiga manufacturers have their own conferences and can be mailed directly for all kinds of information and tech support. In addition, the same companies often upload all their latest product details, release dates, software upgrades and patches on the day of completion.

SETTING UP

So where does AutoPilot fit into the equation? Well, unlike the vast majority of e-mail systems, Compuserve employs a point and click front-end known as CIM – alias Compuserve Information Manager. Unfortunately an Amiga CIM has never appeared but fortunately for Amiga fans, Steve Alhstrom came to the rescue and now sells AutoPilot on-line to anyone running a Compuserve account.

The actual buying or registration of AP is pretty clever. When you initially download the program you receive a none-registered version which allows basic navigation, minus many of the money and time-saving essentials of the full package.

To actually register, simply 'Go SWReg' which takes you to Compuserve's on-line software registration facility where you add your details plus a credit card number, at which point a $69 dollar registration fee is debited automatically.

In a day or two a special e-mail message arrives from AForums Inc. which automatically updates AP to the full version.

Obviously, the temptation with most Shareware-esque software is to ignore the registration and bumble along regardless. However, in the case of AP this is a very big mistake.

Unlike most CIM packages, AP is totally geared to saving you money – in fact the registration will pay for itself in a couple of months at most.

As you can see from the screen shots, AP is hardly the prettiest package in the world, something which comes as a stark contrast to its counterparts on the PC and Mac. Both of the above lavish ridiculous amounts of graphics on a slow point and click interface which often, and perhaps intentionally, makes you forget you're on-line and eating up cash.

AP, on the other hand, concentrates on grabbing and sending what you need with the minimum of fuss. In fact, once set-up the package is more akin to a fully automated off-line reader/mailer than a traditional terminal interface.

The whole system revolves around the forum control panel. Assuming you've added the necessary parameters in the set-up screen, all that remains is to make few simple click selections and the software literally automates the rest.

Initially you're provided with the basic Amiga forum selections, which can of course be added to as your interests diversify. Each is split into four main button banks, plus two reminder buttons which become active if you have unread mail or actions pending. So a typical session might consist of selecting 'get Cmail', to retrieve any personal mail you may have received since your last session.

You might select 'get AmigaArts' which would scan and retrieve all the unread mail in that particular forum. Of course, this can be filtered to minimise the amount received. In addition, you may want to update your file catalogue in the AmigaVendor forum.

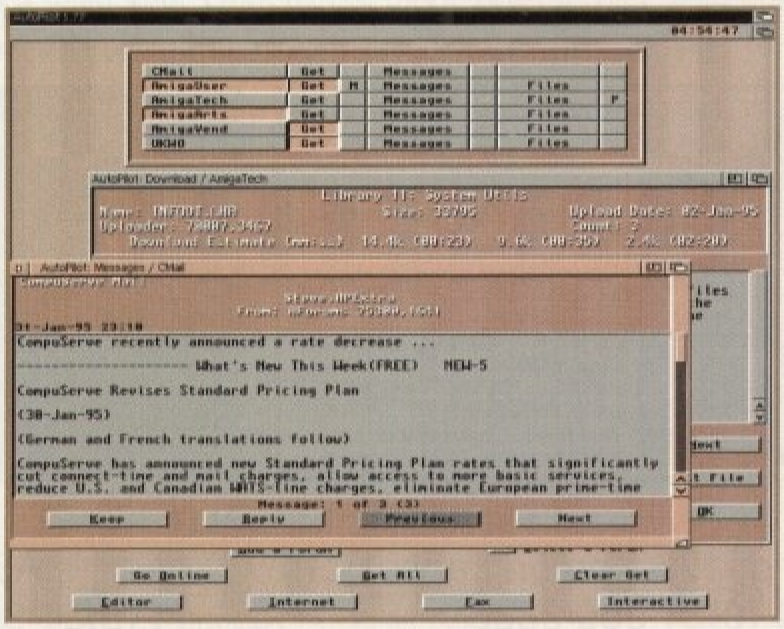
Finally you could select a file/s for downloading from an existing forum catalogue – and of course files or mail can be uploaded to the forum or address of your choice just as easily. As a help to users, if you've replied to or generated new mail since your last visit a pending button will already be lit.

GET THE MESSAGE

As a result, various forums may already show a number of pending actions, and perhaps even the odd M, or unread message button – assuming of course you still have unread mail from a previous session.

In addition, any internet mail, faxes, or telexes you may have prepared will also be queued and ready. All that remains is to hit the Online-now button and the software will log-on, grab all the mail you asked for, send what you've specified, download the files you requested, then log-off automatically.

Of course if you want to stay on-line you have the option to pop into the terminal program and browse around, join in on some on-line chat or conferencing, see what's on offer in the shopping section, organise a plane ticket – in short, take full advantage of the truly huge number of options available in commercial cyber space.



Read your mail, pen replies, select your downloads from the off-line catalogue and sit back as AutoPilot dials in and does its stuff

Verdict

In short, an essential investment for anyone running Compuserve on the Amiga. For what it does the software is faultless, offering all the plusses of its PC and Mac counterparts without any of the unnecessary and expensive frills.

Product: *AutoPilot*
Supplier: *AForums Inc.*
Price: *$69*

For further Compuserve account information phone: 0272 255 111.
Basic monthly membership $9.95

Vote of confidence

star letter

I've noticed over the last few months that advertisements in certain computer magazines for pornographic CDs have become very apparent. I find this steady increase rather worrying. While we dabble with the very latest in technology and software, it would appear that many people are simply interested in using it to view naked women.

Now, I am not adverse to the female form but feel this kind of exploitation is just a little hard to swallow. Another rather disturbing 'phenomena' is the so-called Information Highway. This would appear to be yet another chance for 'pornophiles' to surf the cyberwave and get yet more porn.

I must say I am glad you haven't accepted any advertising from these less reputable CD suppliers and have treated the likes of Cybersex with maturity and responsibility. I know that sex sells everything; look at your local newsagent's shelves and nearly every magazine will have 'Sex', or words associated with this particular activity, plastered on it somewhere – Empire, Sky, Loaded, Cosmopolitan and so on nearly always have some smutty reference.

Let's hope the majority of computer magazines can keep away from this kind of material and get on with the job in hand – that of providing us readers with an informative read. Keep up the good work.

James Radcliffe, Surrey

Well firstly, thanks for the vote of confidence when it comes to our stand on porn. Unfortunately, I don't really think your confidence is entirely justified.

If you take a close look at some of the CD collections on offer in the mag I think you'll discover at least one or two examples of what could be described as soft porn. However, the vast majority are what are commonly known as swimsuit collections. Admittedly, even this kind of material is still exploitation, if perhaps no worse than the efforts of the Sun, Star and Sport.

Obviously I agree that porn in computer publications should be monitored closely, but it's nevertheless very difficult to justify censoring this kind of material which is so widely available elsewhere.

However, let's not get too high and mighty. The truth is that many men, both young and old, enjoy a glimpse of a bit of naked flesh once in a while. Furthermore, this situation isn't purely a male preoccupation. Over the years the *Amiga Computing* offices have seen its fair share of computer porn featuring both male and females, and believe me, nobody looks closer or laughs louder than the ladies in the office.

This perhaps points to the main difference between the sexes when it comes to pornography. Women on the whole see male porn as a joke rather than a true turn-on. Men and boys, unfortunately, are far more suggestible and it's here that a degree of restraint is called for.

I'm by no means endorsing wholesale censorship, which if taken to extremes can be far more damaging than soft porn, but I do agree that the severity of material on CD titles should be monitored. Having said that, I think your concern about the internet is quite valid. Thanks to the knee-jerk reactions of the media, many have been left with the idea that computers are a problem. In fact that's not the case. The real problem are those who are exploiting the benefits of the global village and in turn the young. A popular misconception is that children across the country are logging-on to the first bulletin board they come across and downloading porn.

This particular theory has a number of basic flaws. After all, how many children have a modem, an independently financed phone line – that their parents know nothing about – or indeed the hard cash required to gain access to the few hard-core foreign BBSs? The simple answer, few if any.

The real monitoring should be aimed towards those individuals who are importing such material as a business and then selling it on at profit to young and old alike. The most immediate enemy are the hard-core not the CD bikini brigade.

A few points of view

I feel I just had to write in reference to the Star Letter in issue 82 (January '95). No matter how you look at it, Soft Logik missed their launch date and released a half-finished program.

Despite how good PageStream 3 is going to be, this, in my opinion is no excuse for what they released in the first place. If people don't keep complaining about release dates – and Soft Logik really took the mickey this time – this sort of thing will continue to happen.

Oh yes, and was it *Amiga Computing* that once said they don't review unfinished programs, or was it some other magazine? As Mr Atkin said in reply to the aforementioned letter "I prefaced my review with mention that..."

I read in your reply to the same letter that *Amiga Computing* has an art editor



that merits the title. Is this the same person that writes the publishing section? If not, how about asking him to give it a go? Not that Ben Pointer isn't any good – in fact if it wasn't for him I might not have bought every *Amiga Computing* over the last goodness knows how many years.

Great mag, and I like the design style. Hope Commodore International/Amiga International makes it back into the big time.

Anyway, leaving PageStream and art editors aside, I hear that HiQ have a tower casing for the A1200. How about a review, and do you think the A1200 is expandable enough to warrant buying one?

Paul Graham, Newcastle-upon-Tyne

Firstly you're perfectly right to complain about the PageStream situation. However, their curious approach to customer service isn't anything to do with *Amiga Computing*, or indeed the original letter by Denny Atkin.

Denny's letter was included simply to explain his personal position and further justify the stance taken during the article.

As you mentioned, *Amiga Computing* has refused, unlike many other magazines, to review unfinished software. This has been and still is the case. If you take a closer look at the PageStream article you'll notice it's clearly flagged as a preview and not a review – there's a big difference between the two.

When it comes to your request for a publishing column hosted by our art editor, I'm afraid there's no chance. Unfortunately uncle Tym will be fully booked for the next decade. However,

in the meantime I'm sure you'll be in safe hands with our new writer Frank Nord who has taken over from Ben Pointer who, after three worthy years with us, has decided to retire from writing the column.

As for the HiQ tower you could be in luck. At the moment we're waiting for delivery so there could even be a review in this issue, if not, then definitely the next. Without actually trying the tower it's impossible to comment on specifics.

However, I understand that unlike the alternative tower systems from Power Computing and BlitterSoft, the HiQ variant doesn't support Zorro slots. A feature which in my opinion is by far the most important expansion feature for anyone looking to upgrade their A1200.

Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to reading your letters and selecting the most interesting for publication. Drop him a line at:

Ezra Surf's Postbag , Amiga Computing Adlington Park, Macclesfield SK10 4NP

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.

Blinded by the light

Lightwave, Lightwave and more Lightwave. Perhaps your magazine should be called Lightwave Computing. I'm getting just a little miffed with the constant coverage the package is getting in your pages.

I use Sculpt 4D and would like to see some more coverage of this and other 3D software. Between the Lightwave hype, perhaps it would be possible to slip in a couple of tutorials. I know Sculpt 4D is hardly the cutting edge but it suits my home needs ideally.

Also, I'm a little mystified at reviews of hardware costing over £5,000. I'm not quite sure what the point is in relation to myself and thousands of other amateurs using the Amiga. Otherwise, your mag is of a very high standard, dealing with serious topics in a way that the likes of Format and Amiga Pro can only dream of.

This letter isn't a slagging off but I would like to see more articles that refer to the humble home user who, I presume, are the main staple of your readership.

B.J.Hawkins, Rotterdam

I get the strangest feeling you're not particularly keen on Lightwave. I know that Lightwave coverage may not suit every reader, but our job is to report on the latest and best in the Amiga world.

Whether you like it or not, Lightwave is one of the hottest items on the market and the degree of support for it reflects that fact. Over several years of computer journalism I've never encountered a piece of software which generates such interest from third-party manufacturers and punters alike.

***Amiga Computing* was the first European magazine to review the package and has repeatedly been the first with the growing band of add-ons. We simply reflect the market which, like it or not, is dominated by Lightwave.**

Unfortunately, Sculpt is at the other end of the spectrum. As far as I'm aware it's no longer in production, it has no current support and has an almost non-existent user base. With that in mind, do you really think a two-page article would be better spent on Sculpt rather than Lightwave?

However, to prove Lightwave hasn't entirely overtaken the office you'll find the second instalment of a 3D-specific AmigaGuide column in this very issue.

Although Lightwave is mentioned, this new element in the guide section will cater for all the Amiga's 3D platforms. In addition, last month's issue also boasted a CD dedicated entirely to Imagine. Basically good old supply and demand, it's literally that simple.

Hotel chain

With all the debate about the future of the Amiga going on these days, here is a cheerful note. I work for Forté, who as you're probably aware are a very big hotel chain. I'm also involved with the Posthouse group which have recently installed a new TV system entitled Intelevision.

From this new service you can access all your requirements on-screen, such as billing, wake-up calls and so on. But that's not the news. The news is that the system also boasts a graphics channel which is used to display hotel facilities and promotions.

Guess what I saw when they came to install the system. Yes you got it! An Amiga 4000/030 running Scala.

Now there are 61 Posthouses in the UK and they are all being installed with the same system, each being linked via modem to a central office from which all the scripts are uploaded to all units.

However, each hotel will also be able to adapt the software to include their own topics relating to that specific hotel. Well now, who's worried. I ain't.

Michael Barkhoarder, Coventry

Just when I thought it would never happen, a good news story with the word Amiga in it. Although it may be hard to believe, the Amiga is widely used in hotels, hospitals, airports and anywhere PA information systems are employed.

The system you're describing is an advanced derivative of Scala known as InfoChannel, with the major difference being that satellite systems can be updated from a central control point.

Unfortunately, the bad news is that Scala have now postponed any further development after the next revision, namely Scala 400. The reason of course is nothing to do with the machine, but rather the farcical financial aerobatics of the corporate vultures who appear content to endlessly circle the carcass of what was the CBM empire.

WTS caught out

Just a quick note to all victims of WTS Ltd, and all other dubious mail order outfits. There is a light at the end of the tunnel if you persevere with legal action against them.

Way back in January '94 I ordered an 80Mb hard drive for my A1200 and was promised delivery within a week, and like everyone else the order never arrived.

Without boring you with all the details, in April I contacted a group of solicitors based in Liverpool called Silverbeck & Rymer, who agreed to deal with my claim against WTS limited.

This eventually led to a court hearing in Liverpool last October. Judgement was granted in my favour and I was advised last week by my solicitor that WTS Ltd had paid my original claim, plus interest, plus court and solicitors costs, and that a cheque would be forwarded to me as soon as possible.

I would say that WTS Ltd don't expect people to pursue a claim against them because this invariably ends up costing more than the original asking price of the kit in question.

They knew from the start that they didn't have a leg to stand on, but they still disputed my claim against them, probably thinking I would get bored and drop the action against them.

Please print this letter, as it may give some people hope, and may assure them that if they persevere with action against a mail order company, either via the Trading Standards or via a solicitor, they will more than likely be successful.

Colin Smith, Birmingham

As Mr Smith mentioned, I only hope this offers a glimmer of hope for those presently in litigation with a wayward supplier. I also hope this puts the final nail in the coffin of the WTS Ltd story. However, it would be nice to end on a positive and hopefully useful note.

If you've been an Ezra regular there's a chance the entire Amiga mailorder community will appear as nothing more than a bunch of cowboys.

As a result, I'd like to set the record straight and hopefully put what is far from a common problem into perspective. What I'd like is to produce a top ten of Amiga retailers – whether mail order or otherwise.

Obviously space is at a premium, so let's keep things simple. Just send in a letter with your favourite suppliers, each with a score ranging between one and ten, five being an average/acceptable score for overall service.

Please mark your letters 'EZRA Survey' and if you have a positive story to tell, please make the effort as it could save others a lot of heartache and expense in the future.

Power

For many months now the Zappo/Overdrive has been the only choice for A1200 users when it came to CD-ROM. Now, Power Computing have unveiled a rival that can also be used by A600 owners. Gareth Lofthouse puts it through its paces

Six months ago, following Commodore's failure to produce a CD drive of their own for the A1200, the independent developers stepped in with the Zappo/Overdrive unit. This affordable package not only allowed A1200 users to use digital libraries, but it also gave them access to CD32 games. No wonder, therefore, that it met with instant success.

Considering these are troubled times for the Amiga, the growing CD market has proved itself to be relatively healthy, with numerous new products being released on a monthly basis. It's perhaps no surprise then that someone thought there was room for another CD drive to challenge the Zappo's monopoly. Enter the twin speed SCSI wonder from Power Computing.

To begin with appearances, the drive is more modestly proportioned than some of Power's peripherals, but it retains the high build quality we've come to expect. Its metallic casing looks more than sturdy enough to take the odd knock.

The CD drawer is the same as you'd expect on a standard audio player, thus avoiding the irritation of messing with a caddy, while the simple facia features a headphone socket, a volume dial and the LED light to give you an idea of whether your CD's working or not.

Turning to the back of the Power drive, there are audio ports that allow you to wire the Amiga and CD drive up so that the computer's 8-bit sound can be mixed with the 16-bit sound on the disc. The two 50-way ports can be used for either input or output.

The necessary software has been included to set your SCSI device up. Installation is very simple, using the standard Commodore method, and once the start-up scripts are established it's unlikely you'll ever have to modify them.

The Power drive is a 'Hot Plug' device, which means it can be attached to or detached from the computer harmlessly, even when the machine is switched on. 'Big deal' you may say, but it saves you the effort of having to switch off and reboot.

Like the Zappo, the Power drive not only boots your standard ISO 9660 disks but it can also play CD32 titles thanks to the emulation software included on the supplied floppy disk.

DETECTION

An advantage over the other A1200 drive is that the Power unit automatically detects whether you're using a bootable or non-bootable disk. With the Zappo you had to hold down the left mouse button to raise a selection menu; here the Power drive will either run a game or go to the workbench of its own accord.

PD software has also been included on the disk and is being updated regularly; after we received the package the software was expanded onto two disks. Included is an audio player allowing you to play music and a PD imitation of the commercial back-up tool called QuaterBack. A CD photo-player is also available, though probably at extra charge.

A major attraction of both this drive and the Zappo is, of course, that ability to play CD32 titles. It should be noted that with both there are occasional compatibility problems – particularly if a title uses CD32

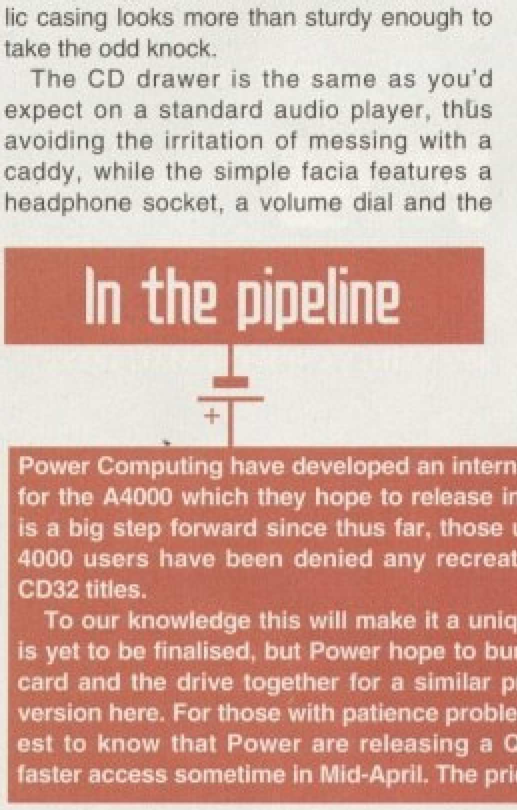


Access the latest CD32 releases thanks to the included emulation software

In the pipeline

Power Computing have developed an internal version of the drive for the A4000 which they hope to release in the near future. This is a big step forward since thus far, those ultra-serious high-end 4000 users have been denied any recreational relaxation with CD32 titles.

To our knowledge this will make it a unique product. The price is yet to be finalised, but Power hope to bundle a SCSI controller card and the drive together for a similar price to the A600/1200 version here. For those with patience problems, it may be of interest to know that Power are releasing a Quad-Speed drive for faster access sometime in Mid-April. The price is set for £299.



Power's CD gives you access to libraries packed with images, sounds and utilities



Plug 'n' play

As has already been said, the SCSI device comes bundled as part of the CD-ROM package. However, Power offer the stand-aloneSquirrel device separately, and since it allows for much more than the connection of a CD drive it merits a closer look in its own right.

An acronym for Small Computer System Interface, SCSI is a set of standards defining a protocol for connecting different hardware devices together and attaching them to a computer fitted with a suitable SCSI interface.

These devices allow you to connect up to seven other SCSI peripherals to your computer, whether they be hard disks, DAT drives, CD-ROMs, scanners or whatever. This is achieved by daisy chaining the peripherals together, giving each of them a defining identity number,

driver



> The drive is more modestly proportioned than some of Power's peripherals, but it retains the high build quality we've come to expect

hardware directly, or makes assumptions about the machine configuration.

A definitive comparison of which titles work on which machines is difficult since it may vary depending on different machine configurations. However, having tested 20 titles the hit-to-miss ratio seemed to be better on the Power drive; in fact the only one we couldn't get working one way or another was Lotus Esprit, which is no great loss in my opinion.

The package seemed to have no problems when used with an accelerator card. When tested with Fast RAM, however, a significant number of titles no longer worked properly – a problem that we similarly experienced with the Zappo. Finally, we come to yet another advantage in Power's hands. The Zappo is for A1200 users only, whereas this CD-ROM can be used by A600 users as well – a fact that should help to give the product a well deserved boost in the market place. Remember, however, that the A600 can't play CD32 games.

Verdict

Power Computing have made a reputation for themselves when it comes to offering good quality products at extremely competitive prices. This CD drive is yet another product worthy of acclaim.

Solidly constructed and simple to use, its ability to use bootable and non-bootable CDs immediately puts it on a par with the Zappo/overdrive. Power's product goes further, however, in a number of important ways.

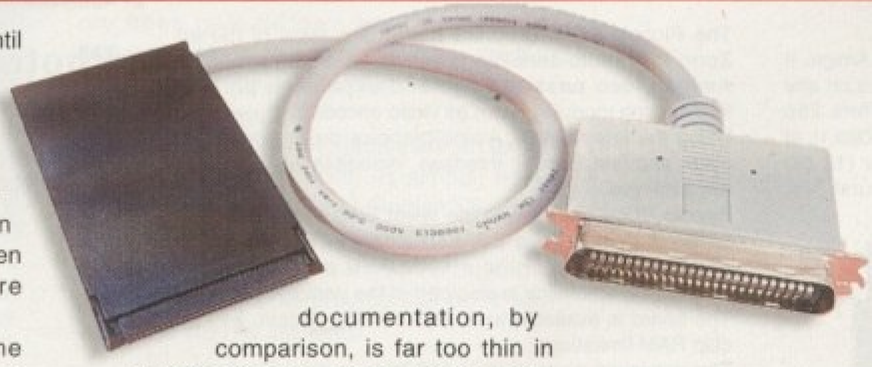
The software's ability to automatically boot CD32 titles is a clever development which gives the system a tidier feel, and the fact that it supports 'hot plug' helps make the drive as simple in use as your average hi-fi, which is good news for everyone.

What kicks the Power package into another league is its exceptional value for money. The Zappo is an IDE drive, whereas for about the same price from Power you get a SCSI drive plus the invaluable SCSI interface – undoubtedly a bargain even though there are some teething problems with the SCSI device package. The CD software has always been cheap, and now the hardware is available at a very affordable price with SCSI thrown in for good measure.

The bottom line

Product: Power CD drive
(+ SCSI controller)
Price: £199
Supplier: Power Computing
Tel: 01234 273000

Ease of use	**9**
Implementation	**9**
Value for money	**10**
Overall	**9**



using SCSI cables to join each unit. Up until this point, SCSI controllers haven't been available for A600/1200 users, so this simple-looking mechanism could have quite an impact on how you use your computer. Connection is very simple as it plugs directly it into the PCMIA slot on the side of your Amiga; care must be taken however since the internal pins are *extremely* delicate.

When it comes to connecting up the peripherals, using the interface with the CD-ROM itself causes no problems whatsoever. Unfortunately, this is as far as the easy ride goes because when it comes to adding further SCSI units to the chain, things can become a little trickier.

The SCSI controller is supposed to be a 'plug-and-play' device, but frankly there's a little more involved. Hi-soft have devoted a manual of over 60 pages to their stand-alone Squirrel SCSI device, a fact alone that suggests the system isn't as straightforward as it might sound. Power's documentation, by comparison, is far too thin in its present form, and there are some important gaps. It's vital, for example, that each unit connected in the chain has an individual ID number, yet the manual fails to explain this issue. Such omissions are a problem, which Power have already promised to put right.

It's a shame that what could be an exceptionally useful piece of equipment is let down by inadequate documentation. The fact is that novices could have problems with advanced set-ups until improvements are made in this area. Fortunately, the product is still being finalised for release as we speak. With the most important addition being an all-important HD-Toolbox utility, which should greatly simplyfy the addition of more devices. If Power can overcome this small but important problem they'll be on to a real winner.

The bottom line

Product: Power SCSI device
Supplier: Power Computing
Tel: 01234 273000
Price: £59.95

Ease of use	**7**
Implementation	**8**
Value for money	**8**
Overall	**8**

EMPLANT

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The new E586DX emulation module offers a high speed 586DX (FPU, MMU, and new instruction set) emulation with complete low-level architecture support, giving you the ability to run DOS, OS/2, NT, Windows 3.x, and even Chicago! There is support for MDA, CGA, EGA, VGA, SVGA video modes (dependant on hardware, AGA or a supported graphics card is required for VGA/SVGA), sound, joysticks, floppy drives, hard drives, extended memory, and more!



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The Macintosh emulation module is a 'generic' Macintosh with the speed of the emulation depending on the processor your Amiga is using. An A3000 is equivalent to a MAC IIci. An A4000 is equivalent to a Quadra 900. Support for up to 16 colours is provided for non-AGA machines. A4000 owners can use a full 256 colours! Up to 24 bit (16 million+) colours is supported using third party video boards. Built in multiple file transfer allows for quick and easy transfers between the Amiga and MAC emulation. Support for AmigaDOS devices, Scanners, CD ROM, MIDI, SyQuest removable drives, Printers, Modems etc. Full stereo sound is supported too! Requires Macintosh ROMs (not supplied).

The possibilities with a multi-platform machine are endless. Now you can take advantage of a whole host of great software previously unavailable, and use them to compliment each other. By upgrading your Amiga (extra memory, faster processor, etc) you instantly upgrade your emulation too! All major graphics cards are supported for improved video performance such as: CyberGraphics, Picasso II, EGS-Spectrum, Vivid-24, Rainbow II, Rainbow III, Visiona Paint, Merlin, Retina, Retina Z3, Piccolo, PiccoloSD64, EGS110/24, and OpalVision!

Blittersoft are the exclusive European distributors for Utilities Unlimited. We provide a full technical support service, as well as software upgrades to all official UK boards. Check before you buy.

EMPLANT BASIC	£249.95
EMPLANT OPTION A (AppleTalk ports)	£299.95
EMPLANT OPTION B (SCSI)	£299.95
EMPLANT DELUXE	£349.95
E586DXSM MODULE	£119.95

PICASSO II

PICASSO II is the leading graphics card on the Amiga. It offers unrivalled support and retargetable graphics on any Zorro based Amiga. Workbench emulation offers 256 colours, even on non-AGA machines (Requires OS3.1) at resolutions up to 1600x1280. Supports HiColour (16 bit) and True Colour (24 bit) graphics - 16 million colours!



There is no longer a Chip RAM limitation and screen configuration is provided through PicassoMode, which allows the creation of custom screens quickly and simply.

PABLO is the new Video Encoder option for *Picasso II*, expanding it with two additional video ports, one standard Composite Sync Signal, and one S-VHS (Y-C) compatible port. All PAL compatible video devices can be plugged into Pablo, such as a colour TV or a video recorder. Pablo has 15KHz overload protection and is supplied with cables/adapters, Animation examples and a 24 bit animation player.

PICASSO II 2MB	£299.95
PABLO VIDEO ENCODER	£129.95

OS 3.1



Many of the latest software requires the latest operating system. Now you can upgrade to KickStart 3.1 for virtually any Amiga. Non-AGA machines can deliver a 256 colour Workbench with OS3.1 and Picasso II.

OS3.1 FOR AMIGA 500 OR 2000	£84.95
OS3.1 FOR AMIGA 1200, 3000 OR 4000	£94.95

Please specify machine. Also note that revision 3-5 motherboards require linking to be added. We strongly recommend that a professional computer repair/service company undertake fitting. We cannot exchange any damaged or incorrectly fitted components.

ARIADNE

Ever wanted to set up a network but been afraid of the complexity involved? Now there is a simple but effective solution for any Zorro based Amiga. In addition, Ariadne has two extra parallel ports and includes Commodores industry standard software solution ENVOY.
Ariadne offers 10Base-2 (Thin ethernet, coax cable) and 10Base-T (Twisted pair, western jacket), Socket for a boot ROM, SANA-II compatible driver for ethernet and parallel port, 32Kb cache to support the CPU and full manuals.

You can hook up additional Amiga`s to the parallel ports with Liana.

ARIADNE	£199.95

LIANA

Liana is the ideal solution for a quick, easy yet efficient connection between two Amiga`s. Simply plug the special cable into the parallel port, install the software and you are ready to go. Now you can share hard drives etc. without on a small budget. The software supplied is ENVOY.

LIANA	£59.95

PICCOLO SD64

The Piccolo SD64 graphics board is a state of the art Zorro II/III (auto-sensing) graphics card with a built in Amiga video pass-through and expansion port for forthcoming modules (such as video encoder).
Using the latest 64 bit Alpine graphics processor, 64 bit blitter and fast Zorro III interface, incredible 24-bit speeds are achieved.
Piccolo SD64 comes with the latest EGS system and 24-bit paint package as well as loaders/savers for many common packages and a slideshow program. A full Workbench emulation is also part of the package.
The board is available as a 2Mb or 4Mb system, with no chip RAM limitations.
The maximum pixel clock is 110 MHz and user definable resolutions to 1600x1280 are achievable.
The 2Mb board can display a maximum of 800x600 in full 24 bit colour, whilst the 2Mb board can display 1024x768 (interlace).

PICCOLO SD64 2Mb	£299.95
PICCOLO SD64 4Mb	£349.95

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CYBERSTORM

CyberStorm is a fully modular system offering huge increases in power and expansion capabilities. This design allows processor upgrades from the base 40MHz 040 system to the world beating 50MHz 060! With additional upgrades such as the SCSI-II and the I/O module, CyberStorm offers unequalled possibilities.
The CyberStorm carrier board inserts into the 200 pin Amiga fast slot, and has ports for the CPU, Memory and I/O modules. The CPU module is prepared for clock speeds to 80MHz, with active cooling and an extra expansion port for future modules (ie DSP board). The CyberStorm memory board can carry 4 SIMMs using standard 72 pin modules, single or double sided and either 4,8,16,or 32Mb (Max 128Mb). Data transmission of >50Mb/sec is achieved. The CyberStorm I/O module consists of a Fast SCSI-II interface with up to 7Mb/s Asynchronous, 10Mb/s Synchronous transfers and Active bus terminations, 10Mbit/s Ethernet controller (10BaseT) with SANA driver and BNC/DSub 15 connectors and high speed 2MBaud RS232 Serial interface. The CyberStorm SCSI module has the same specification as the SCSI interface on the I/O module.

CyberStorm 040 40 MHz No proc.	£449.95
CyberStorm 040 40 MHz	£729.95
CyberStorm 060 50 MHz	£899.95
CyberStorm Z3 SCSI module	£149.95
CyberStorm I/O module	£349.95
CyberStorm upgrade 040 to 060	£399.95
CyberVision 2Mb	£299.95
CyberVision 4Mb	£369.95

The CyberVision64 graphics card comprises of a 64 bit graphics processor and Blitter with 32 bit Zorro III bus interface. It is available in 2Mb or 4Mb versions (using common memory modules), offering up to 1600x1200 interlaced, 1280x1024 non-interlaced and 135MHz video bandwidth. Planar-to-Chunky pixel conversion is performed by on board hardware, some 6-8 faster than typical software solutions and accelerating Workbench emulation. Support for draggable and virtual screens, expandable bus for future cards (video, JPEG, MPEG..) and Amiga video pass-through.

*The CyberStorm 060 and CyberVision64 should be available by the end of March. We have back-ordered - Reserve your unit **NOW!***

CYBERVISION 64

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PhotoWorX software to read PhotoCd format, save, image process etc.	£49.95
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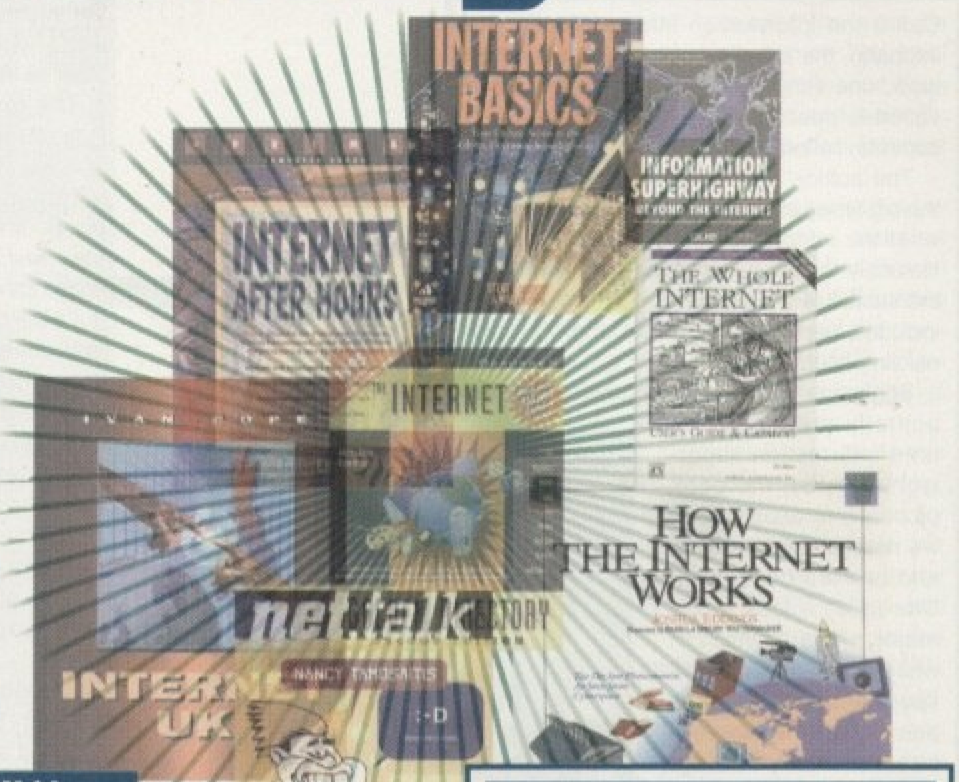
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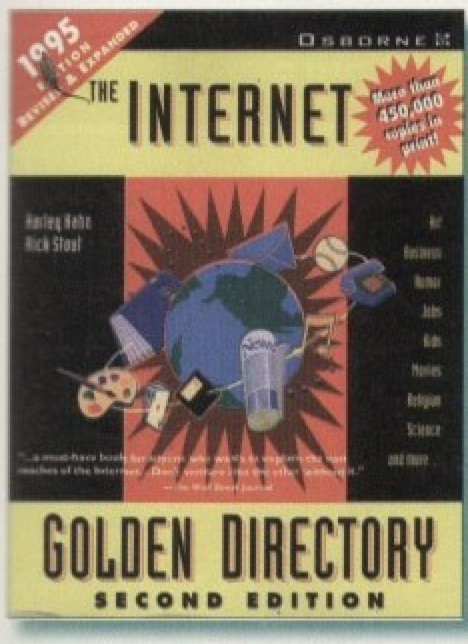
also plesurf@cix.compulink.co.uk

Knowledge for the Net

Publishers know the internet means big business, so there's an abundance of titles available on the subject. Gareth Lofthouse and Adam Phillips select titles worthy of a place on your bookshelf – and warn you about the odd rip off in the process



The Internet Golden Directory – 2nd Edition



With over 30 million users and enough forums and obscure names to fill an encyclopaedia, a sigh of relief and fascination is breathed when the Internet Golden Directory lands on one's desk with a resounding thump. Like the Yellow Pages, this excellent tome (812 pages in all) lists a whole series of topics and where to find them, giving their Net addresses.

There are 5,000 areas to cruise round, covering a vast array of topics and subjects for nearly any interest. Computers, politics, romance, drama, drugs and home maintenance are just a small sample of the diverse subjects offered.

Laid out alphabetically with clear listings and an index, even the absolute newcomer will soon be sinking their Net-virgin teeth into the juicy offerings available at the mere clicking of a few keys.

Liberally sprinkled throughout the book are various humorous ads and excerpts from conversations or stories held on the Net. They can make interesting reading while looking at all the forums on offer.

For the beginner, getting around the Internet itself will require either a great deal of patience or an investment in a reference-cum-tutorial book. Despite this, the directory does give its own brief analysis of Usenet and how to access newsgroups that contain large stockpiles of information, pictures and sounds.

At £22.95, it's hard to fault such an excellent reference book. With its simple, easy-to-read style, the Internet Golden Directory (second edition) is an essential buy for any so-called cybersurfer. If you're buying a modem, they should provide this book with each unit sold as standard.

Author: Hahn and Stout
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £22.95

Verdict – If you have a modem and want to dip your toe in the cybersurf then this is simply unmissable. An excellent idea superbly executed.

Internet UK

Reference guides like the Golden Directory are well worth having, but there's usually a bias towards US sites which the author of this book has tried to redress. Consequently, there's more discussion of UK services like Demon and CIX than you'll find elsewhere.

It's good to see the book provides for the Amiga as well as the PC and Mac, and the coverage devoted to the different UK providers is very handy indeed. Otherwise there's the standard brand of information covering tools, resources and services, plus an interesting discussion of some of the problems behind the hype surrounding the internet. The author also looks at what's happening in America as a pointer to future developments in the UK.

A minor complaint would be that it costs almost as much as the usual Net books, but owing to the smaller range of facilities in the UK it is relatively slim in content. Despite this, it's well worth a look for anyone fed up of hearing about the topic from the American angle.

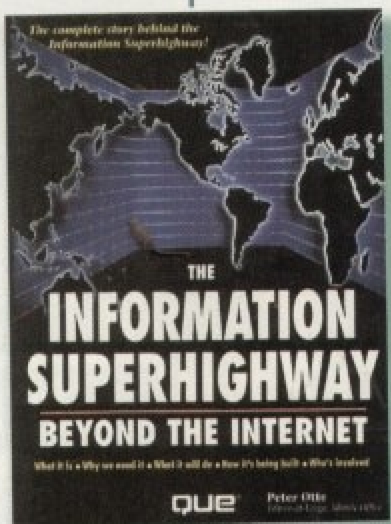
Author: Ivan Pope
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £19.95

Verdict – This is not ideally a standalone book, but it could make a very useful supplement to some of the other titles available.

The Information Superhighway

Call it the information superhighway, the infobahn, the infopike or the information network, one thing is clear: Technological innovation is opening the door to a new era in communication and interactivity.

The author, Peter Otte, has opted to take the big view, and I mean the very big view, of what the information superhighway means. Naturally the book discusses the internet, but the subject is placed in a wider context which includes interactive TV, cable and educational simulators.



Beginning with an explanation of what is actually meant by the term information superhighway (IS), the book proceeds to analyse why we need it, what it will do and how it's being built. Otte takes a look at the major players, each of whom has a different perspective on what the IS actually is and where it should be heading. Microsoft's Bill Gates, for example, is keen to move in on the IS by introducing the type of user-friendly software that has been the company's trademark.

Government bodies, on the other hand, have a wider vision. US Vice President Al Gore, in particular, has shown a high level of interest by promoting a technology infrastructure that could give schoolchildren and business professionals unprecedented competitive advantages in the global marketplace.

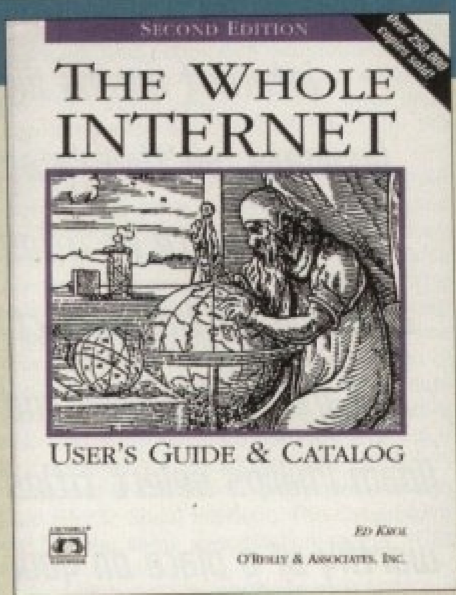
Unfortunately, such interesting sections of the book are interspersed with other material that seems to have been included more for padding rather than relevance. I am sceptical about the importance of home cinema in the IS revolution, while a description of the basic components of a desktop computer (i.e. monitor, CPU, keyboard) is surely unnecessary for anyone likely to read this book.

Overall, however, it's an interesting book to dip into with some valuable insights on what is undoubtedly a new technological horizon.

Author: Peter Otte
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £18.49

Verdict – A credible account of the growing infobahn and its significance for the future. Recommended for anyone interested in this field.

The Whole Internet



On the flip side to the 'isn't the Net wacky and fun' type of book, we have the tomes which attempt to introduce readers to the vast resources of serious information that the internet can offer. Aimed at professionals and business people, The Whole Internet falls into the latter category.

The lay-out and style of the book is instantly appealing. Explanations are made in a no-nonsense manner, with essential information being highlighted by bullet points, and diagrams and on-screen examples are used to reinforce the reader's understanding.

Of the books on review, this has the most definitive approach for the reader who wants to use the Net to its full potential. Following a non-techy introduction to how the internet works, there's material on getting started with FTP, using e-mail and dealing with problems, plus information on services like Gopher and Archie.

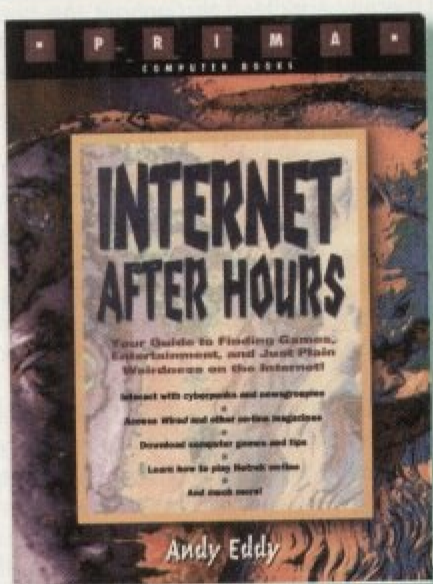
In addition, the author has also included a catalogue so that readers can find out not only how to use the Net but where to go on it. This makes it a book of exceptional breadth, yet unlike other titles reviewed this has not made it superficial in its approach.

Marketed justifiably as a bible for the internet users, if you really want to get down to brass tacks then The Whole Internet is seriously recommended.

Author: Ed Krol
Supplier: O'Reilly & Associates
Telephone: 01264 342832
Price: £18.50

Verdict – Serious but very easy to use at the same time. If you're only going to buy one book on the subject then make sure this is it.

Internet After Hours



The Net can be a very sombre, serious place to find yourself. A place populated by eggheads posting their papers, where weighty issues are discussed and theses are advanced. A place to be avoided unless work absolutely demands you get involved.

Believe it or not, however, there are some strange and interesting locations out there if you know where to look, and After Hours has been written to point its readers in the right direction.

It's a well balanced book, written in a very readable style with contents that should interest both the beginner and advanced user alike. The essentials of how to get started on the search for the weird and wonderful are there if necessary, and though the guide is in a light vein, there's plenty of step-by-step screenshots to guide readers on their way.

Technological limitations mean that games on the Net have to be rather basic in the graphics department. However, chapters on MUD and NEWTREK introduce you to the unique pleasures of multi-player gaming in cyberspace.

It's a book which has deliberately included information about some of the more risqué areas of the Net, such as the sex newsgroups. Among the innocent stuff there's topic areas like bestiality, so the easily offended should tread carefully.

More informative than a plain directory, and more specific in its purpose, this is a must-buy for the recreational surfer.

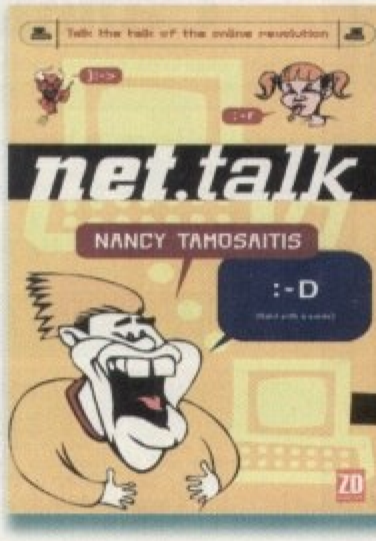
Author: Andy Eddy
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £18.49

Verdict – A well targeted book that's fun to dip into and informative at the same time.

net.talk

Author: Nancy Tamosaitis
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £5.99

Verdict – Nubies beware ! This is the type of rip off to be avoided.



When a subject like the internet gets so much hype, it's only natural if enterprising people try to make a quick buck out of it. Congratulations to ZD press, then, for producing Cash-in Product of the Month !

Learn how to 'talk the talk of the on-line revolution' says the cover, designed to look like a cheery phrase book for cyber-speak. If this is what the on-line revolution is about, I for one am bailing out now.

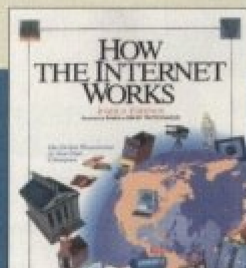
The so-called language of the Net takes the form of either twee acronyms or the irritatingly named emoticons. For example, [:=) means an older smiley listening to Walkman radio.

> Today most people are primarily receivers of information through the electronic media, in the next decade we'll each transmit more information over the same lines.
>
> *Vice President Al Gore*

If you came across someone on-line who thinks this sort of thing is either useful or amusing, surely common sense would have you hitting the quit key with a lightening reflex action.

It may sound like I'm sticking the boot in on what is obviously intended as a non-serious book for the internet. But the trouble is that this light-hearted, insubstantial piece of nonsense will set you back £6 – the same price, in fact, as your average novel. Somehow I don't think it's worth it.

How the Internet Works



A strange one, this. Illustrated from front to back with colourful pictures and diagrams, it looks more like a human biology book for children than a be-all, end-all guide to the Net.

The book cover says it will show the on-line phenomenon as seen from Cyberspace. This claim, of course, is meaningless; what we actually get is a guide that attempts to cover the subject from every angle, from how the transfer protocols work to the future of the information highway.

Unfortunately, this means that some of the topics are covered rather superficially. The three pages on WWW might fill a reader in on what it is, but it is not enough to make me confident about using it.

Diagrams can make information easier to absorb, but they should be used discerningly. Some here are unhelpful, and you get the feeling they were included for colour rather than to inform. I suspect the problem is that this book is part of a series, and the internet doesn't lend itself to this type of approach very easily. What's more, the authors seem unclear about what the book's aims are and who it's aimed at.

For instance, the cartoon characters and the fact that picture content outweighs text could give the book an instant appeal to children. Unfortunately, most would quickly become disheartened as they struggled through explanations of Telnet or Medline. On the other hand it doesn't seem quite right for the adult seeking an introduction. Advice like "Flame wars are a waste of resources, and only result in hurt feelings," is typical of an oddly patronising approach.

It's good to see a book on the topic with a bright and cheerful appearance, especially after ploughing through the grey listings of the average Net directory. I can't help feeling, however, that the idea would have worked better if the authors hadn't sought to take so much on board.

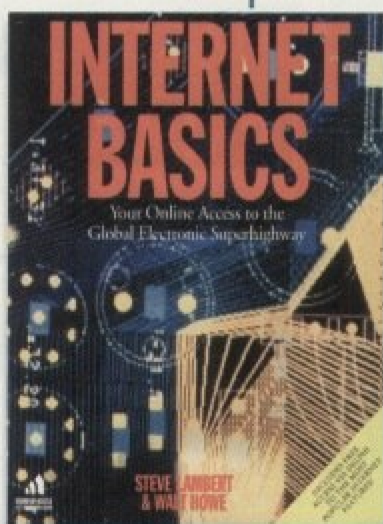
Author: Joshua Eddings
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £23

Verdict – A strange title that often falls between two stools, but one which could provide a good introductory overview if used with other guides.

Internet Basics

The likes of the Golden Directory are all very well but learning how to find your way round the monster network from cyberspace can be a tad daunting for the newcomer. The ideal solution is to splash out on a reference book that can take you by the hand and lead you through the workings of the net. Internet Basics is one such book.

As pointed out by many a seasoned cyber pro, don't expect to leap in there and start accessing the White House classified files on your home computer straight away! But while the first sight of the book may have you praying for the day when everything is icon driven (it will happen, don't worry), initial misgivings can be deceptive.



Internet Basics takes you from the very beginning, detailing the ground rules for understanding the network, and on the way through the 494 pages it illustrates and amuses so that you get the most from your travels through the electronic world. While the style of writing may appear dry in a few instances, it isn't like some horrendously technical manual on the inside workings of an Austin Maestro gearbox.

Detailed definitions are given on all the buzzwords you may have seen bouncing round the pages of the computer mags recently. World Wide Web, bulletin boards and gophers are given a clear breakdown and more obscure but equally essential areas such as Finger (helps to find out who else is logged on to a site), Archie (a system that checks over 8000 FTP sites to find a particular file) and more are explained in detail.

The actual book is split into a series of chapters breaking down the process of connecting, searching and downloading anything you may need in the Internet. From the different ways of connecting to the Internet and using electronic mail to the intricacies of netiquette, if you need it it's there in the book.

Despite a rather serious looking cover, Internet Basics is a surprisingly easy read and obviously written by two writers who know their gophers from their FTPs. Recommended.

Author: Lambert & Howe
Supplier: Computer Manuals
Telephone: 0121 706 6000
Price: £23

Verdict – A reference book for Internet is essential and this is a good example of one that is easy to follow and palatably written.

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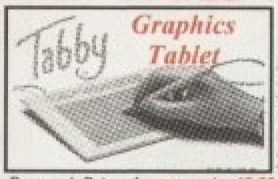
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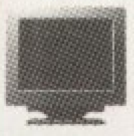
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AMIGA COMPUTING ADVICE SERVICE

Black scenes

As a relative newcomer to the Amiga, more specifically the A1200, I must admit that I am finding computing extremely enjoyable, helped by your magazine.

I now have a fairly extensive software collection made up mostly of serious software, one of which, VistaLite, is the cause of this letter.

VistaLite is a wonderful piece of software which I find extremely easy to use while providing me with excellent landscapes. The problem is, my A1200 is capable of 256 colours due to the AGA chipset, yet when I render a script in 256 colour via VistaLite the rendered images are black.

When I try rendering the same scene with less colours the scene is fine, but no matter how hard I try I simply cannot create 256 colour Vanims. As you reviewed this package I was wondering if you could shed some light my way?

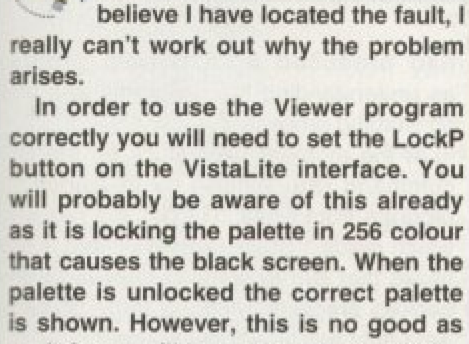
D. Moth, Warrington

Your VistaLite problem is a curious chap and although I believe I have located the fault, I really can't work out why the problem arises.

In order to use the Viewer program correctly you will need to set the LockP button on the VistaLite interface. You will probably be aware of this already as it is locking the palette in 256 colour that causes the black screen. When the palette is unlocked the correct palette is shown. However, this is no good as each frame will have a separate palette.

If you switch the Show Render option on you will notice that the 256 colour picture is rendered accurately with LockP on. When the palette is finally worked out it suddenly turns black.

So what's the answer? My advice would be to call Virtual Reality Laboratories and find out for sure if this is a bug. It may be worthwhile learning the hard way and actually creating your own Vanims by actually rendering and saving each frame individually. The palettes will always be the same. The scripts provided are interesting but not very useful.



When using the LockP function to render 256 colour Vanims in VistaLite the palette turns black

Clinging drawers

At present I own an A600 but am hoping to upgrade to an A1200 very soon. I am interested in getting into DOS and Workbench but the floppy system I currently have is too slow.

Disability aside, I have managed to work my way through most of Workbench but have a problem deleting certain drawers. I select these drawers and then select delete from the menus but the screen flashes and I get an error message reading;

```
Error while removing VT: (202 object is in use
```

Needless to say the drawers are not deleted. Any help you could offer would be greatly appreciated.

B. Harding, Northampton

You would be surprised at how many people get stumped by this one. Some programs, when installed on hard drive or floppy disk, make what is called an Assign – you may already be familiar with this command.

When an assign is made to a drawer that drawer cannot be deleted until the assign is removed. You can do this in two ways. You can remove the assign by selecting Execute Command... from the Workbench menus and typing in the following, using your example:

```
assign VT: remove
```

This will remove the assign from the system and you will be able to delete the drawer. However, it is likely that the assign is in your User-Startup file in the S directory. Type in the Shell, ed s:user-startup and look for the line in the file that reads Assign VT: (your directory). Delete this and then save the User-Startup file by pressing Esc, x and then Return. This should cure the problem.

User notes

Although there are many benefits of owning a hard drive, mine is full with junk which I can't delete because I don't know which programs they belong to.

My LIBS directory has almost 150 files and I'm sure most of them are simply ➤

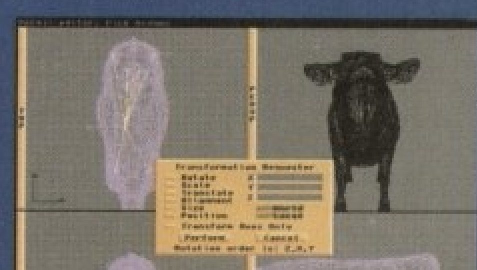
Imagine that

I own a copy of Imagine 2.0 and am keen to get into 3D. I feel that I am making good progress considering the complexity of the program but I wonder if you could help with a problem I am having with brush maps.

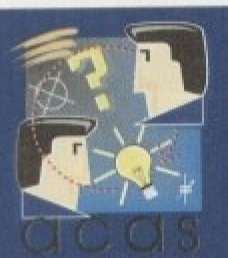
How can I place two maps in exactly the same position on an object? Placing them manually is difficult and invariably inaccurate. Is there a way they can be positioned identically?

J. Thomason, Dudley

The key to placing maps accurately on top of each other is the Transformation requester. Using this requester, place the first map and jot down its position, size and orientation. When you come to do the second brush, open up the Transformation requester again and copy the first coordinates into it. Your maps will now be positioned accurately on top of each other.



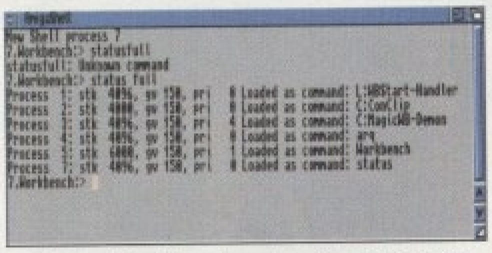
Although Imagine is complex to learn, once mastered it becomes a powerful ally to quality 3D graphics



Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your Amiga software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a thorough description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

Any questions?



Avoid multitasking slow-down by reducing the priority of power-hungry programs

➤ wasting space. As I understand it, the Amiga has the ability to read and write notes to a file so that users can tell which file a particular library is connected to.

Is there a way to add notes to a file? This would really help me to tidy up my hard drive.

K. Lewis, Newcastle

Notes, or filenotes as they are correctly known, can be added to all types of Amiga files, but as to their usage most Amiga owners don't bother with them. They are a novelty that soon wears off.

There are two reasons for this. There are so many associated DOS and system files that to label all of them would be impossible. The second problem is that many library files are used by several programs so, linking them to one is rather pointless.

You can add your own filenotes to programs by opening up the Shell and typing in the following:

```
filenote (filename) comment ("filenote")
```

To read any file notes type in the Shell:

```
list (path)
```

This will produce a list of the files in that directory in the order (Filename) (Length) (Flags) (Date created) (Time created) (Filenote).

Slow tasks

As we are all aware, what distinguishes the Amiga from other home computers is its ability to multitask. Although I could never really see the advantage of this facility when I first bought my Amiga it has now become an essential function.

Due to the nature of my particular interest, it is common for me to have five or six programs loaded at once – many of them performing complex tasks such as rendering.

When the programs are loaded and working my Amiga slows dreadfully and Workbench becomes almost unbearable. Is there any way I can stop this from happening?

T. Reynolds, Liverpool

When programs are launched the processor of your Amiga gives each one a priority. Many programs allow you to set this value which ranges from -127 to 128. In order to slow or speed up the tasks you will need to alter their priority. The first thing to do is open the Shell and type in Status Full. This will provide you with a list of all the current running tasks and their current priorities. Note down the number of the process that is taking processor time – 0 is normally the highest setting. In the Shell, type in the following:

```
changetaskpri (new priority) process (process number)
```

Keep the range of task priorities between -5 and 5. Go any higher than this and the Amiga operating system may slow considerably.



Avoid multitasking slow-down by reducing the priority of power hungry programs

DOS backups

As an A1200 owner I am currently learning about Amiga DOS which I feel is important if I want to get the most from my computer. I wish Commodore had produced a DOS help program as understanding the programs is a time-consuming process.

At the moment I am stuck on the DOS command Bru. When I try to launch this program from Shell, all I get is a requester which reads **Stack Overflow** bru. I have heard that Bru is some kind of hard drive backup program which is fairly powerful. Am I right as I would like to use it?

P. Read, Bath

You are correct – Bru is the DOS hard drive backup system. It is a complex beast which requires more extensive explanation than I can afford here.

What I will do is show you example script files that will allow you to perform a full hard drive backup and restore using Bru. The examples below show how to estimate the amount of disks needed for the backup, perform the backup and perform the restore:

Check how many disks will be needed

```
Stack 50000 ; a large stack is essential
CD (path) ; enter the path to count
Bru -e ; work out how many disks will be required
```

Backup the hard drive path

```
Stack 50000 ; a large stack again
CD (path) ; enter the path to backup
Bru -c ; creates a new archive in the default drive
```

Restore data to a hard drive path

```
Stack 50000 ; a large stack yet again
CD (path) ; enter the path to restore to
Bru -x ; begin the restore from the default drive
```

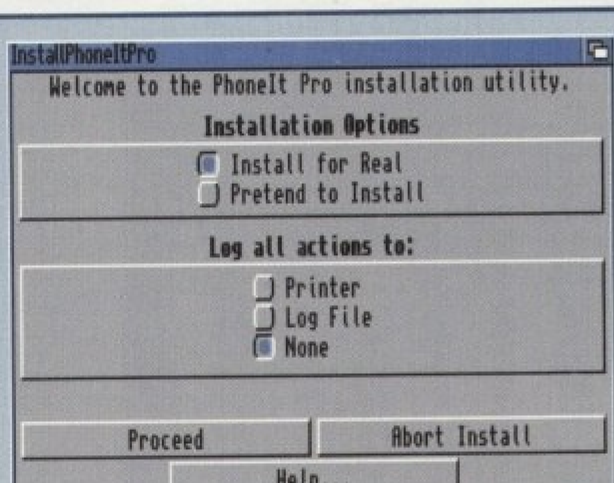
Bolean or NOT

The Installer guide in Amiga Computing was very helpful and I have produced some pretty spectacular scripts. Is there anyway Bolean algebra can be used to perform certain functions on numbers or variables? I am thinking of writing an Installer game and this would prove useful.

B. Davies, Prestatyn

The following commands will allow you to use Bolean algebra in your scripts. Expr, expr1 or expr2 all indicate either numbers or integer variables. A game in Installer – that sounds interesting!

```
(AND )
(OR )
(XOR )
(NOT )
```



A game in Installer – now that's an interesting idea. Installer caters for everything – even Bolean algebra

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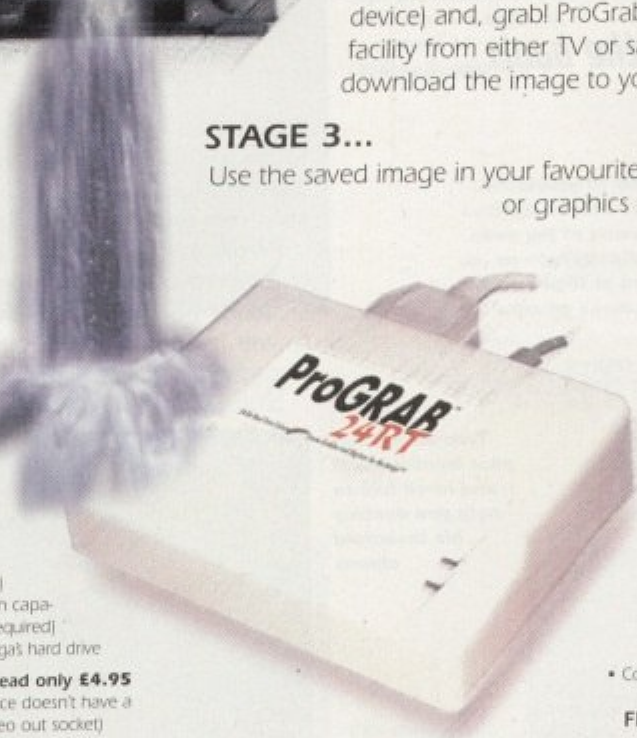
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The best things in life can indeed be free. At least, that's what Dave Cusick tells himself whenever he makes a visit to the bank

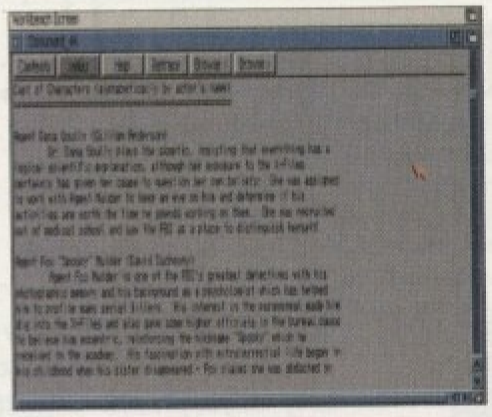
While the Amiga's long-term future may still be in the balance as the corporate big boys squabble over who will obtain the production rights, at the grass roots level the machine is very much alive as a bumper crop of PD produce confirms.

Worthy of mention but unable to be squeezed into these packed pages this month: a bizarre and totally incomprehensible French demo called Twingo (what's it about? Answers on a postcard...), about 20 zillion AGA demos (many of which could make an appearance over the next few months), a promising demo of a Doom clone, and much more. For now though, feast your eager eyes on this delicious selection of tempting treats...

Cult TV Guide

Produced by: various
Available from: 17 Bit Software
Disk No. 3503

In which episode of Red Dwarf did the crew visit a planet created by Rimmer's imagination? Actually, this colossal Amigaguide file won't tell you that because the author of the Red Dwarf section has forgotten the episode name (It was 'Rimmerworld', fact fans). But that's about the only omission from this summary of plots and programmes from across the comedy, science fiction, adventure, animation and horror genres. Find out which edition of Monty Python's Flying Circus featured the infamous 'Nudge nudge, wink wink' sketch, or what happened in episode 27 of Thunderbirds, or the original broadcast date of part 53 of Blake's 7. And hurrah! Even Automan is included, a series from 1984 that loads of my mates have claimed was merely a figment of my imagination.



Learn the background of the lead characters in all your favourite cult science fiction series

Ultimately pointless but nevertheless quite interesting and guaranteed to settle (or provoke) many arguments, the Cult TV Guide will appeal to television devotees everywhere.

Insectoids from Outer Space

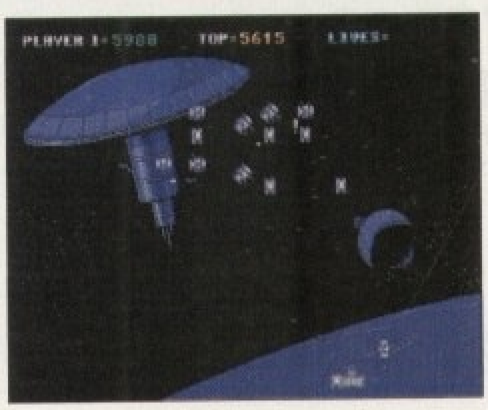
Programmed by: Mark Sibly
Available from: Your Choice

While at first glance Insectoids may appear to be a straight Space Invaders clone, there's actually a lot more to this enjoyable shoot-'em-up than is immediately evident.

Predictably, you control a small ship which must take on wave after wave of alien invaders. Fortunately for once you are not limited to simply blasting them, since you also have a tractor beam at your disposal. When you activate this you can pull the nasties in, and thereafter until the end of the stage they will sit alongside your ship, firing at their former buddies whenever you do. This new twist makes for plenty of addictive mass destruction.



Trap an alien in your tractor beam and force him to help you destroy his Insectoid chums



Classic blasting fun with the Insectoids from Outer Space

That's not all that's new, however. Every now and then instead of a simple alien-blasting stage there will be an asteroid field to navigate or a mother ship to dock with. While these stages are not in themselves spectacular, they do make a welcome change.

All in all, Insectoids is an attractively presented game with plenty of addictiveness that should ensure it appeals to arcade fans.

Soulkitchen

Produced by: Silents Denmark
Available from: 17 Bit Software
Disk Nos 3510A/B

Opening with a marvellous 3D sequence where the view follows a spaceship flying through a tunnel complex, Soulkitchen immediately distinguishes itself as one of the best demos to appear for some time.

Tuneful and slightly offbeat music accompany some impressive displays, such as spinning dotty toruses and an excellent kaleidoscope effect. In addition to some rippling pictures, there is also a 'Gouraud Morph' whereby a rotating gouraud-shaded object constantly changes shape, assuming at different times forms as diverse as a wine glass and a space shuttle.

Admittedly the whole thing doesn't last a terribly long time, but for firm believers in quality and not quantity, Soulkitchen should be well worth a look. We await the sequel, apparently to be called Fruitkitchen, with bated breath.

Zaxxon

Produced by: Bignonia
Available from: 17 Bit Software
Disk No. 3518

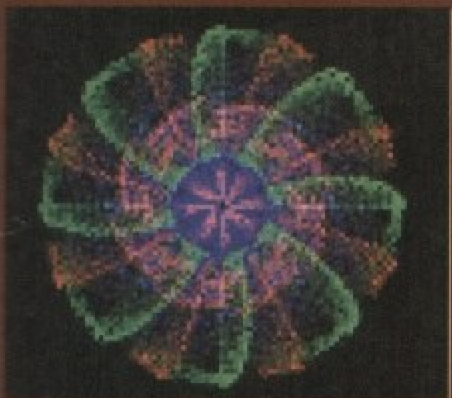
Another in a long line of 8-bit hits converted for the Amiga, Zaxxon boasts genuine C64 quality graphics and the same incredibly frustrating gameplay of the original. I remember despising this little number because I never felt entirely comfortable with the slightly confusing control method.

For those unfamiliar with Zaxxon, it is your task to guide a small spaceship through a scrolling isometric 3D landscape, dodging missiles, shooting gun emplacements and so on along the way.

Unfortunately, the slightly unconventional viewpoint meant that the biggest problem I always found was judging the height of certain obstacles above ground level. Consequently, I would generally



The marvellous introduction to Soulkitchen features a starfighter flying at great speed through a tunnel complex

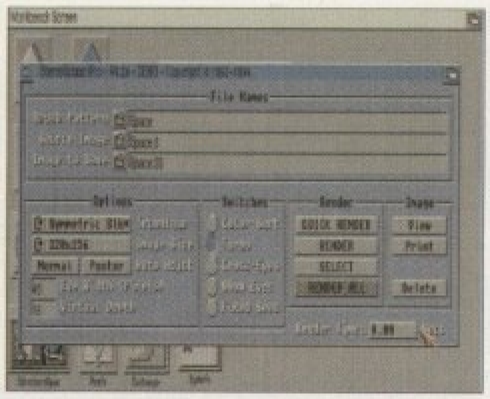


Remember having a kaleidoscope as a kid? Bring all the memories flooding back with Soulkitchen

StereoScopic Pro 4.2 Demo

Programmed by: Timothy Eckel
Available from: Your Choice
Disk No. GR164

Coffee table fillers for the nineties, random dot stereograms – or magic eye pictures, or SIRDS, or whatever else you care to call them – seem to be everywhere these days. Apparently the 3D images they contain cannot be seen by around one in ten people, and until recently I would have included myself in that bracket. Then suddenly one day I gave it another go and, as if by magic, it worked. I no longer felt excluded, rejected and alienated... my life was complete.



The nerve centre of StereoScopic Pro

If you can't afford the extortionate prices currently being charged for slim volumes of the things, this DIY package could be just what your wallet needs. A WB2.04+ machine is all that's required before you can get up and running, but a printer definitely helps as I found the images a lot easier to see on paper than on a monitor screen.

While this is only a demo version (the real thing will cost a hefty $30 direct from the American author) it still allows you to create and print some decent stereograms which you can casually dot about the living room when some particularly tedious and unconversational guests drop in.



Can you see the 3D image? More magic eye pictures than you can shake a stick at, courtesy of StereoScopic Pro

Calling all PD libraries...

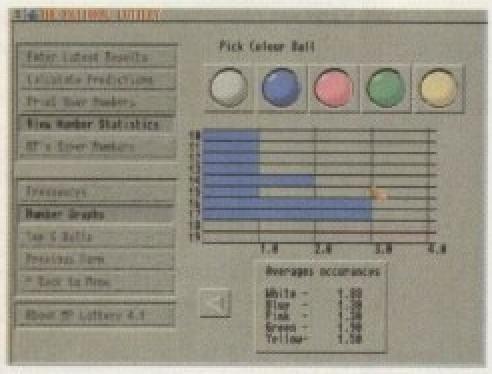
...and individuals with absolutely any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. I promise I'll at least look at your work. Please clearly label the disk, and include a cover letter supplying a description of the disk contents and some basic instructions. The address to send the disks to is:

Dave Cusick
PD submissions
Amiga Computing
Media House
Adlington Park
Macclesfield SK10 4NP

MP Lottery 4.1

Programmed by: Michael Pratt
Available from: Michael Pratt

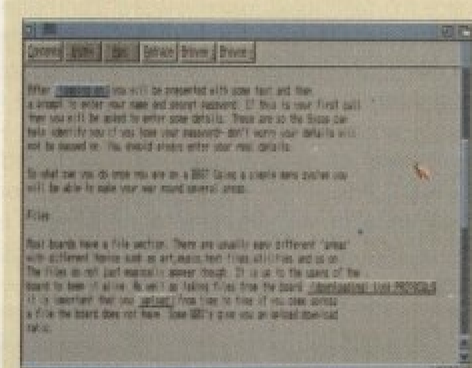
If things carry on this way, before long there could be a regular Public Sector feature along the lines of 'Sure-fire National Lottery ➤



According to MP Lottery, 18 and 19 have yet to come up, so statistically they ought to be winning soon...

Comms Guide

Produced by: Paul Moore
Available from: Roberta Smith DTP
Disk No. UC117



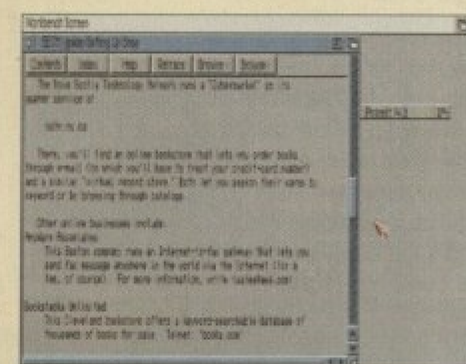
The Comms Guide is brimming over with useful tips to get you started

These two disks offer invaluable advice and assistance to help beginners successfully break into the jargon-filled world of comms. Both come in the form of large Amigaguide files.

Comms Guide covers topics as diverse as deciding what modem to purchase, logging on for the first time, and archiving and dearchiving files. It tackles a whole range of subjects in a friendly and informative manner. Some topics also have pictures attached, for example, to help illustrate recommended software. The helpful glossary alone makes this disk an essential for the eager would-be comms buff.

EFF's Guide to the Internet

Produced by: Adam Gaffin
Available from: 17 Bit Software
Disk No. 3506



Find out about a wealth of interesting places to visit on the Internet with EFF's Guide

The Guide To The Internet is less general but no less interesting. It includes, among many other things, details of how to contact Bill Clinton and what different 'smilies' – those :-) symbols – mean.

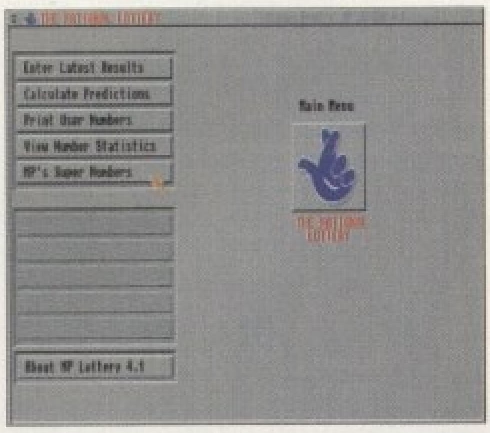
Between them these disks offer a wealth of invaluable information which could go a long way towards de-mystifying the initially baffling comms scene.

position the ship at exactly the right height to fly directly into things, whereupon the ship would be returned to the start of the current level – sometimes a long way back.

Still, for those who were skilful enough to avoid dying so regularly, 8-bit Zaxxon was an enjoyable challenge. The only question is whether, after all this time, it will still seem as much fun...



Relive those 8-bit days with this identical Amiga version of Zaxxon



The friendly and simple main menu of MP Lottery

prediction program of the month'. There is, of course, the fact that if lots of people get hold of a good program of this kind, any jackpot won with its help would be split between hundreds or thousands of people. Anyway, for regular lottery entrants who haven't had a great deal of success, I suppose it could be worth a try.

MP Lottery stood out from this month's batch of programs for its attractive presentation and simple interface. As usual, previous sets of winning numbers can be entered and saved to disk, and the program uses these to produce statistics for the most and least frequently occurring numbers – by the law of averages those that have escaped ought to come up soon.

MP Lottery is available directly from the author and since it costs just £1, should be well worth the investment for any lottery lover.

The Art of Richard Bateman

Produced by: Brian Switzer
Available from: Blue Rose PD

Richard Bateman is, it would seem, a fine wildlife artist whose work is presented here in the form of a two-disk slideshow. High quality digitised pictures of the artwork were produced using Digiview 4 on an Amiga 2000, and these are cycled slowly through to the accompaniment of some upbeat and suitably inoffensive music.

All sorts of creatures, from woodpeckers to fox cubs, are covered. Among the best of the bunch are the pictures of a chipmunk, a coyote, a lioness, some puffins and a tiger among long grass. That said, all the artwork is of a very high standard.

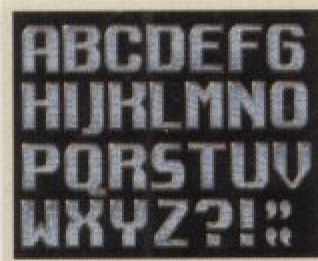
This disk acts as a good advert for the artist's talents and if the other titles in the Art-On-A-Disk range come up to the same high quality, then this should prove a popular series.

Superb digitised images from the Richard Bateman originals





Video Graphics



One of the more impressive fonts on the Video Graphics disks

Produced by: Blue Rose PD
Available from: Blue Rose PD

This two-disk set is a collection of backgrounds, fonts and brushes aimed squarely at the desktop video enthusiast. Particularly useful are the several superb patterned backgrounds, with effects ranging from a sort of bubbling gold to a wonderful textured dark blue. These are ideal as, for instance, backdrops to scroll credits over.

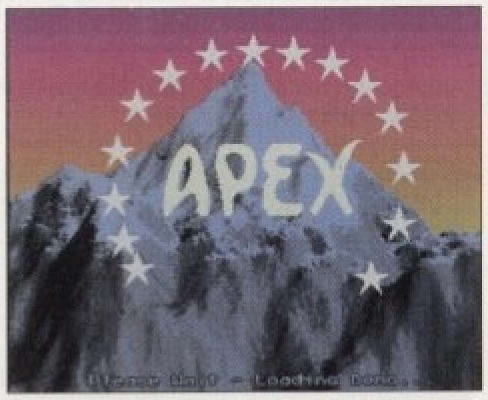


Need a fancy title for that family video? Look no further than Video Graphics

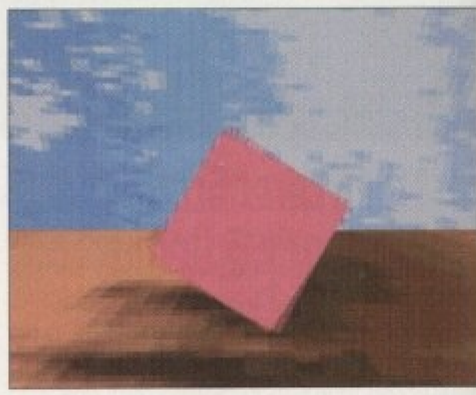
The brushes included vary considerably in usefulness. They are all simple and some, such as 'Our Wedding Day' written in an attractive display font, have obvious value to the amateur video maker. However 'Awake' and 'Sleep' – a pair of pictures of what appears to be a medusa against a stone-effect background – would hardly be used on a regular basis, and their inclusion is somewhat baffling.

The fonts are similarly variable. Many are the sort of capitals-only things you would see in the scroll texts of especially mediocre demos. On the other hand there are some quite good examples, such as 'Golden Ann', which is a decorative wedding-style display font, and 'Dinosaur', a caps-only stone effect affair.

Still, while only a few of the graphics on these disks are going to be genuinely worth getting hold of, the commercial alternatives are often quite expensive. For that reason, video fans might still find this offering worth a closer inspection.



Erm, this screen from Dotsy looks vaguely familiar...



This static shot doesn't do it justice; this sequence from Dotsy is one of the most impressive in a demo for a long time

Dotsy

Produced by: Apex
Available from: 17 Bit Software
Disk No. 3509

You can see from the start that this demo doesn't take itself too seriously. The opening screen takes the michael out of the Paramount Pictures mountain logo, which promptly gives way to a host of decent if unoriginal effects.

Plenty of dotty pictures are included, which 'ripple' as if they were drawn on blankets being slowly shaken. There is also the obligatory rotating 3D cube, but for a change here it rolls along a fast-moving, parallax-scrolling, technicolour backdrop – the sort of effect you show to owners of the new 'super consoles' just before you break their hearts by whipping out Pagestream.

In all, the whole demo, while not warranting an 'unmissable' tag, does not disappoint. As with most demos it is highly unlikely you'll boot it more than a couple of times before consigning it to the disk box for all eternity, but at least there are enough interesting effects here to make Dotsy stand out from the pack.

Welcome to paradise...

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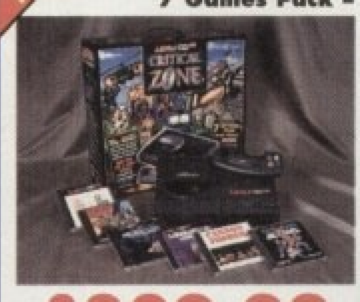
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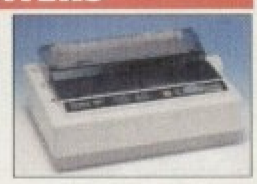
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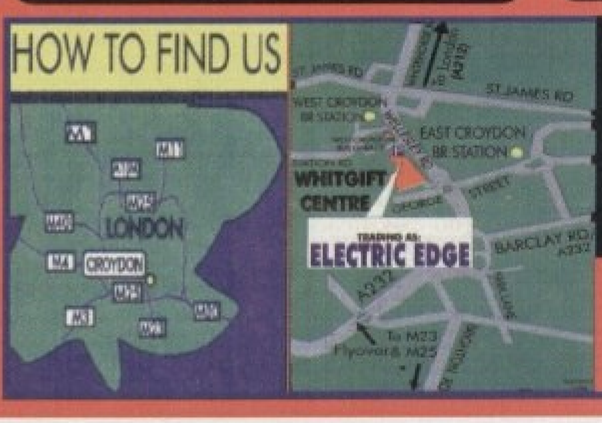
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G772 UN-SENSIBLE SOCCER very similar to Sensible soccer games. RECOMMENDED
G773 FRUIT MANIA - Brilliant Fruitmachine.
G774 TRICKLE TREAT - like DOOM on the PC
G775 FOOT-BALL MANAGER - new version
G782 SOLO ASSAULT 3D like Wing Commander
G783 SEED OF DARKNESS - Brilliant graphic adventure
G784 NANO FLY Superb explore game RECOMMENDED
G785 THE GREAT GOLD RAID - very addictive
G787 ANT WAR V1.9 (LATEST) not 1.3
G788 ZENO-MORPH - Great graphics
G789 TASK FORCE very good MIND SHADOW clone
G790 GREEN FIVE Amazing graphic like FLASHBACK
G791 PROFESSIONAL BINGO CALLER
G792 MARTIAL SPRIT brilliant STREET FIGHTER II
G797 INTENSE like AKAI-WARRIOR in the arcade
G798 6 EXCELLENT CARD GAMES collection
G799 MOOSE DRIVE (A500 1.3 needs 1mg chip ram)
G809 BLITZ 2 fast action shooting games
G810 EXIT 13 Brilliant puzzle
G811 TEMPORAL MISPLACEMENT- graphic adventure
G812 A DAY AT THE RACES - V.Good horse racing games
G820 BOULDER ORIGINAL with 80 levels
G821 BOULDERDASH CAVE/LEVEL CONSTRUCTION KIT
G822 BOULDER COLLECTION 2/3 160 level (2 disks)
G837 BOULDERDASH 80 cave/level
G839 BOULDER PACK 640 BRAND NEW LEVELS on 8 disks, must for all Boulderdash fans
G860 ALIEN NETWORK - new Space invader
G862 BATTLE FORCE excellent text adventure.
U863 GNU CHESS the best chess with 10 level
G866 SWORD OF YIG Graphic adventure
G867 POWER-TETRIS 1 or 2 player Tetris RECOMMENDED
G868 SUPER SMASHING TETRIS very playable Tetris
G870 CHESS II & CHECKER One of the best around must for all CHESS or CHECKER players
G871 GRAVITY FORCE 2 1 or 2 player thrust clone
G872 SCHNEBITZ Commercial quality puzzle games
G875 DELEXE GALA v2.3(new) add new feature & bonus game + 2 player RECOMMENDED. Get it now
G876 THE KRILLIAN INCINDENT like ELITE 2/Epic
G878 QUANTUM - Maze collect & escape type games
G879 RAGS TO RICHES - like MONOPLY
G884 WIPE OUT- mindless blasting game
G885 GODZILLA Another shoot-em up
G886 SUPER MEGA FRUIT- All new Fruit Machine
G887 STEWARDS ENQUIRY New Horse racing games
G888 DRIVING MANIAC 3D (fill vector like Indi 500) car racing - very fast. RECOMMENDED
G889 PLANET FALL - Luner Lander clone
G890 INTENSE 2 Follow up to part 1 RECOMMENDED.
G891 BUCK TOOTH ADVENTURE Very good multi level shoot/collect em up RECOMMENDED
G892 PENGO 2 - Maze type games. Recommended
G893 SUPER OBLITERATION Blast asteroid very similar to PANG 2 lots of weapons. RECOMMENDED
G894 SUPER INVASION II - New SPACE INVADER
G896 ULTIMATED QUIZ - pub style quiz machine
G897 THE SHEPHERD Brilliant POPULUS clone. REC.

EDUCATIONAL

E001 KIDS PAINT excellent Paint program for kids
E002 COLOUR IT brilliant computer colouring book
E003 TREASURE SEARCH find the hidden treasure.
E004 LEARN & PLAY I (not A1200) many maths & games
E005 LEARN & PLAY II more education programs
E006 SPANISH TRANSLATOR Spanish <> English
E008 MR MEN (WB1.3) brilliant story adventure
E009 ASTROMY tutorial on solar/star etc system
E010 SIMON & SPACE MATHS maths & Simon games
E011 EDUCATION PACK (5 Disks) packed with lots of ed programs ranging from maths to games recommended
E019 DINOSAURS teaches you all about Dinosaurs
E020 WORLD DATABASE requires (2+ meg)
E021 STORY LAND II interactive puzzle games rec.
E022 LANGUAGE TUTOR teaches you 4 languages
E023 TALKING COLOURING BOOK talking Dpaint brill
E024 EASY SPELL II improve your kids spelling
E025 SCRABBLE requires 2-4 players. brilliant
E026 WORDS can help you solve the crossword
E027 OSWALD Very colourful large cartoon game
E030 EVOLUTION breed your own hybrid
E031 IQ TEST + IQ GAMES pack 1 excellent
E033 TYPING TUDOR very good typing tutor
E035 CHESS HELPER help/teach how to play chess
E036 BASIC TUDOR learn about Amiga basic Prog
E038 AMIGA TUTORIAL 7 part tutorial
E039 COMPUTER CARE how to care about AMIGAS
E040 GUIDE TO LOWER BACK PAIN tutorial about the spine & how to avoid back pain. Recommended
E041 KIDS ALPHABET displays all alphabet letters
E042 FRACTION & SILOUEST maths & games, excellent
E043 MATH MASTER teach/test you more on maths
E044 STEAM ENGINE V2 graphics & tutorial
E045 PETROL ENGINE tutorial & animated graphics
E046 GAS TURBINE ENGINE tutorial & anim graphics
E047 STIRLING ENGINE tutorial & anim graphics
E050 DREAM FOR ANGEL explains the meaning of dreams
E051 INVISIBLE WORLD brilliant, recommended
E052 FISH TANK turn your Amiga into a FISHTANK
E054 DEMOLITION MISSION simple game for kids
E055 WORD POWER solve crossword puzzles etc. Good
E056 WORM HOLE simple game, ideal for children.
E057 APPLE CATCHER catch falling apples, brilliant
E058 CROSS MAZE & CRYPTOKING 2 excellent kids games
E059 VERB QUIZ find the word & its relatives. Brill
E061 KING JAMES BIBLE (4D) complete bibles, excellent
E066 TARROT clairvoyace in a instant
E068 GALLOW fancy a game of hangman?
E070 MATH DRILLS teaches all basic maths skills. Vgood
E071 ERROR INFO give info on why your Amiga crashes
E075 WORLD-WAR 2 graphics tutorial on WORLD-WAR related program eg simulate Starprobe/ molecube/ etc
E076 SCIENCE an excellent collection of science. Ideal for all who are interested or studying science. Recommended. This pack comes on 4 disks
E080 KIDPRIX great childrens paint program
E081 ASTROMY PACK- This is an amazing collection of programs related to astronomy. Can help to locate certain or star positions etc. Must for anyone who studies astronomy or hobby. Great (4 DISKS)
E073 PICTURE & LETTER learn to read - first step
E074 AMIGA BEGINNERS GUIDE tutorial on Amigas
E085 NODDY PLAYTIME demo. Very good
E080 KID PRIX more excellent paint programs
E081 D.T.P FOR KIDS easy to use, excellent
E092 SING A RYHMES sing a song
E094 HIGHWAY CODE TUTOR questions on highway code.
E096 READ & LEARN (2D) THREE LITTLE PIGGY Story with speech & graphics. Brilliant, recommended
E097 BACK TO SKOOL vol 1 collection of the best
E098 BACK TO SKOOL vol 2 an education program
E099 BACK TO SKOOL vol 3 & games. RECOMMEDED
E100 LITTLE TRAVELLER information on world wide
E101 WORLD GEOGRAPHY world with map & text
E103 DISCOVERY OF THE ATOM. Tutorial on the Atom (2D)
E104 DESKTOP GUIDE TO MUSIC (3D) guide & tutorial
E107 TRUMPTY FIREWORK ALPHABET Very entertaining way to teach your child the ALPHABET
E109 MR MEN OLYMPIC (2D) many events to complete
E110 CULT TV DATABASE (3D) info on early TV series
E115 ELETRONIC WORLDS (3D) Complete K.James BIBLE
E116 HOW THE EARTH BEGAN - theory how the BIG BANG exploded and created all the stars & galaxies
E118 WORKBENCH 2 tutorial on Workbench 2
E119 DINO WAR Quiz on dinosaurs
E120 JUNIOR MATHS Great learning aid for teaching kids on the maths subjects. RECOMMENDED
E121 PICTURE PUZZLE brilliant JIGSAW type games
E122 WORD FACTORY Brilliant, teach kids words
E123 KID DISK 1 - Brilliant education pack
E124 KID DISK 2 - more education programs
E125 JURASSIC PARK lots of info on dinosaurs
E126 CHILDREN SONG 2 contains 5 excellent songs
E127 MING SHU (A500 only) Brill Chinese Astrology.
E128 ASTRO 22 PRO.V3 - The latest astrology program that accurately calculates the position of the planets, eclipse, zodiac positions etc. Recommended
E129 KID DISK 3 (DTP) Drawing program for kids
E130 FRENCH VERB TESTER should help you with French.
E131 CULT TV DATA BASE II (2 DISK) info on early TV
E142 KID DISK 5 & 6 - 2 disks full of brilliant games
E148 CHESS & TUTOR - FULL teach you how to play chess
E150 INTERNET - FULL guide to internet & superhighway
E161 CLI & SHELL TUTOR (help) ideal for beginners
E162 DELUXE PAINT GRAPHIC TUTOR V 3 & 4 Recommended
E163 JAPANESE - teaches you the Japanese language
E165 KEYBOARD TRAINER An excellent typing tutor
E167 WORD POWER - spellchecker/crossword solver/teach
E163 CROSSWORD CREATOR - design crosswords
E165 CHESS II & TUTOR brilliant Chess II games
E166 PAINT IT (not A500 1.3) latest COLOURING BOOK
E169 HISTORY OF AVIATION Vol 1 Excellent disk
E171 CHILD FAVOURITE - Education program
E175 FRANTIC GUIDE TO COMPUTER (2D) brilliant & funny
E177 CYBER PUNK 2 for Cyberpunk freak only
E181 SIGNITURE CREATOR customise your own signiture
E182 VIRUS WORKSHOP V4 comprehensive guide
E184 IMAGINE'S VIDEO 2 disks
E186 WORKBENCH 2/3 GUIDE Online help/Complete Guide to AMIGA DOS commands. Very useful.

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X74 MADONNA (SEX) (3)
X01 SHOWER GIRL
X03 BODY TALK (2)
X09 MARIE WHITTAKER
X24 SABRINA SPECIAL
X25 DIE FILKINGER
X26 MADONNA EARLY DAYS
X28 KATHY LLOYD
X30 MEGA-MAID
X31 CALENDAR GIRL
X32 MAYFAIR
X33 UTOPIA (4 DISKS)
X45 GIRLS OF SPORT
X49 PAGE 3 GIRLS
X70 GON GON GIRL
X71 TINA SMALL
X91 Calendar girl 95

MUSIC

M001 BEASTY BOYS-We Want Some Pussy songs
M002 MICHEAL JACKSON-song BAD.
M003 DO THE BARTMAN
M005 100 C64 TUNES (not A1200)
M006 BAT-DANCE REMIXED
M017 GUN & ROSES - YOU'RE CRAZY.
M018 THE XMAS SONG (disk) very funny
M025 MONEY FOR NOTHING-DIRE STRAITS HIT song
M027 BLUES HOUSE (2 disks)
M029 SAFE SEX DEMO - very funny
M031 BETTY BOO (2) needs 2 drives (brillant)
M058 SGT PEPPER (2D)
M072 MADONNA - hanky panky song.
M084 C64 GAMES MUSIC
M115 MAHONEY & KAKTUS 2 - 40 tunes compilation
M125 ADAMS FAMILY
M147 BANGLE - walk like an Egyptian
M150 TIFFANNY I Think We Alone Now
M171 MADONA - (like a virgin)
M173 JANET JACKSON - RHYTHM NATION
M177 PET SHOP BOYS
M184 SAM FOX. (PLEASE ME)
M186 MADONNA . (RESCUE ME)
M188 JOE Le TAXI
M189 MICHAEL JACKSON (SMOOT CRIMINAL)
M194 JESUS ON E'S (2 disks)
M205 RAVE - more Rave
M262 A TO Z OF C64 GAMES MUSIC (4) brilliant
M314 DICK TRACY (madonna) (2)
M335 STAR TREK & STAR TREK NEXT GENERATION (2)

ANIMATIONS

A005 FILLET THE FISH long story animation
A013 SPACE-PROBE- in search of Alien life form
A054 THE RUN - Lotus being chased by police
A072 LIFES A BITCH - Hmmm for 18 + only
A138 KYLIES (2) Kylie slide & music. Brilliant
A173 HELL RAISER II - CREEPY horror show
A179 THE LIVING WORLD SLIDE SHOW - creepy crawly
A187 PERIL OF THE DEEP (2) Massive sea creature
A190 TERMINATOR II (2) - Brilliant
A193 NEMESIS COMIC - very good comic.
A208 THE LADY AND THE TRAMP - short movies
A213 CANNON FLIGHT- Brilliant graphics
A215 MADONNA SLIDESHOW III - Must for Madonna fans
A225 ANOTHER 5 WAYS TO KILL A MOLE - Classic
A226 NEW VIZ - Hmm for 18 + only
A230 TOO MUCH 3D - Superb Spaceship anim
A231 ALIENS II - Definitely the best Aliens
A236 WHIZZER + CHIP - for Comic fans
A248 PERVERSE SLIDES - funny but rude
A255 BART SIMPSON MEGA DEMO (3 Disks)
A262 STAR-TREK the Next Generation SS
A288 SATURN FLY BY - Remarkable anim VOYAGER II
A290 CHRISTMAS ANIMATION - Ahhh to late now
A293 MANGA (2) very cute Jap chic & robots demo
A295 MAYHEM ON WHEELS 3-real motorbike/car crash
A306 TORNADO Slideshow
A320 GORE - gruesome Horror
A336 FAST CAR - Loads of fast & inexpensive show
A414 MANGA WORLD 3 - More brilliant Manga Pics
A417 AKIRA X-MEN - more MANGA comic Shows

VIDEO TITLERS/TOOLS

U181 VIDEO NOTE database for your video collection.
U431 VIDEO APPLICATION (2 disks) many video titler prog
U250 VIDEO TOOL (3) loads of video utils. Recommended
U964 TELESUBTITLE - new video titler
U965 VIDEO MAXE V4.33 .The latest in video
U352 DESKTOP VIDEO 1 & 2 (best video titler tool) cataloguing system. Dozens of functions
U671 TELE TITLE 2 - Great new VIDEOS titler
U513 VIDEO TITLER (2 disks) more VIDEO TITLER-BEST
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IF YOU HAVE A PROBLEM WITH INSTALLING A PRINTER DRIVER ON ANY DISK, WE CAN INSTALL IT FOR YOU FOR ONLY £2
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U793 STAR PRINTER STUDIO - for all star printers
U794 SEIKOS STUDIO - For all Seiko printers more specific printer driver for the above printer
U733 PANASONIC STUDIO - 9 & 24 pin printer driver & util
U734 CANON PRINTER STUDIO not A500 (1.3)
U735 PRINTER STAR 24/200 FONT DESIGNER - shareware
U762 CITIZEN PRINTER MANAGER for all Citizen printer owners containing many useful printer util & drivers
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U001 A-GENE help you trace your family tree.
U024 D-LOCKS proctect your disks & files
U027 ULTRAPAINT & SURF paint & 3D model program
U029 CAN DO programming language
U046 DARKSTAR no.2 (vol 2-5) loads of utils
U058 DISK MAG CREATOR create a disk magazine
U117 NORTH C compiler (2) brill programming language
U122 SID 1.6 copy/delete/move file made very easy
U131 TETRA COPY play Tetris while copying disk, great
U135 MOST USED UTILITIES (2) very useful util collection
U145 XCOPY PROFESSIONAL very powerful disk copier
U146 C-MANUAL 2 (4) Teaches you how to program in C
U153 ASSASIGN PRINTER Utilities very useful
U169 PAINT AND ANIMATE still the best
U170 BIORHYTHMS V4.01 display your own biorhythms
U184 MASTER SEKA V1.6 complete Assembler language
U186 UNLIMITED DISK CREATOR all tools on are here
U187 M COMPUTER AID DESIGN - Was commercial product
U188 SHOWIZ slide show maker 24+ wipes effect
U191 SID II copy/delete/move/run file using a mouse
U220 AMOS-PAINT V. good paint package, lots of features
U222 GRAPHICS UTILITY(3) lot of graphic converter tools
U225 AUDIO SOUND TOOL (A500) (A1200)
U226 50+ MOST USE UTIL loads of very useful utils
U229 SLIDE-SHOW CONSTRUCTION KIT easy to make
U240 ARCHIVER TOOLS lots of crunchers
U242 IMPLODER 4.0 disk file compressor. Excellent
U243 The A-T COPIER (not WB3) 13 disk copier
U254 FRACTAL UTIL loads of fractal programs, brill
U257 DISK CRUNCH Compilation not WB 2
U282 LAND BUILDER create realistic landscapes
U284 COPY & CRACK TOOLS back up your software
U287 P.C. Q PASCAL (2 disks) programming language
U300 MESSY SID II read/write PC/MAC etc files.
U301 AUTO DISK LOGGER catalogue your disk
U321 GRAPHIC Util 1 (3) loads of brill graphic utils
U324 GRAPHIC util 2 (3) even more Graphic tools
U333 SCENERY MAKER more landscape generators
U334 EMULATOR COLLECTION II (lots of emulators)
U335 FREE COPY back up commercial games
U337 MODEL 3D Brilliant 3D object designer
U338 MULTI VISION (2) disk/files utilities
U340 HACKER-TOOLS many ripper tools
U350 POOL TOOL - predict horses with the best chance
U351 RACE RATER Similar to above, but both
U358 STAR CAT 2 - create catalogue disk, easy
U359 SEEKER find lost files on floppy & hard drive
U360 R.P.G (2) adventure creator
U363 DISK REPAIR KIT -s alvage & repair damaged disks
U365 SAMPLE MAKER make samples with out Hardware
U367 MUSIC MANIA many version of music maker pro, brill
U372 WORD SORT process ASCII files
U377 NCOMM III more modem software + packer util
U378 DIGITAL ADDRESS BOOK V.good address book
U379 HOT UTILS more amazing utils
U380 UNICOPY fantastic disk copier
U381 GRAPHIC RIPPER (not WB3) plenty
U383 LYAPVNOU GENERATOR- generate space scenery
U384 MED V3.2 (latest) Brill music maker
U387 P-SUITE add colour/animate to text?
U388 SUPER CLI - fast disk, fast load etc. OK
U391 FORTRAN complete programming lanaguage
U392 AMIGA DEX - Good database program + more
U393 UTIL collection of lots of useful utils
U397 FORM UNLIMITED design any type of form
U399 FRACSCAPE V1.2 new fractal similar to VISTA
U400 SOUND TRACKER V2.6 music maker
U401 PLUS ISSUE(not WB1.3) Vol 1-14 each disk pack with various WB2 & WB3 utilities. Recommended
U420 SPEED BENCH (not WB1.3) create auto boot WB
U425 NIB 2 very popular copiers
U436 The RIPPER COLLECTION (not WB3) many ripper programs
U440 RADBENCH recoverable WB (state Amiga when order)
U442 SYSINFO test & print info on your AMIGA sys
U444 FONT FARM font creator/editor/design new fonts
U449 AMOS UPDATE 1.4 add more commands for AMOS
U457 WHOM 2 (3 DISKS) Detail/database on 51 films
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U473 FINAL FONTIER 3 (4 disks) Star-trek magazine
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U490 B-TEC UTIL - Amazing pack with 207 utilities
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U495 HARD DISK UTIL brill collection of Hard disk util
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U498 WORK-MATE - 15 brilliant disk utils compilation
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U510 ULTIMATE BOOTBLOCK Collection II + more
U512 ZIRCON UTIL - 30 MOST USEFUL UTIL 2, brillant
U515 WIT COMPLETE UTIL 20 most used utils
U516 AMOS FRACTAL fractal mania
U521 SPECTRA PAINT III rival to Dpaint
U542 SEA HORSE CHEATS more cheat/passwords etc
U550 SCENERY CONSTRUCTION KIT fractal, recommended
U551 ASSASSIN BOOT BLOCK over 50 bootblock protector
U555 CROSSWORD CREATOR (not WB3) crosswqrd maker
U561 PERM CHECK a full POOL PREDICTION program
U568 ICON CONSTRUCTION KIT icon making program
U569 ICON ready made (4 disks)
U582 DPAINT GRAPHIC TUTOR (not WB3) excellent
U584 NEW SUPER KILLER Regonise & kill 120+ viruses
U590 600 NUMERIC PAD EMULATOR (A600 only)
U591 DEGRADER (not WB 1.3) A500 emulator
U592 KILL AGA - make older programs run on A1200
U600 C64 EMULATOR II util & document
U601 DISKSALV II + ABACKUP (not WB1.3)
U603 THE CHEAT COMPENDIUM for over 450 games
U620 HOW TO CODE IN C (2 disks) + many examples
U622 ACTION REPLAY V1.5 - cartridge on disk
U623 ACTION REPLAY V4 (A1200 ONLY) same as above

VERY LATEST

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SPECTRUM GAME Vol 1-40
FRED FISH 1-1000 & SCOPE CATALOGUE 1-220
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Pro C manual V3.0

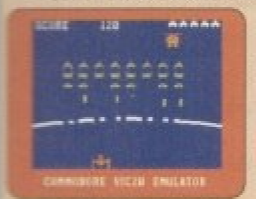
complete collection of document, utilities for learning how to program in the computer machine language C. It consists of 6 manuals, with more than 40 chapters & 175 fully executable examples complete with source codes included. This manual V3 comes on 12 disks (suitable for all Amigas) only £11.50

U645 PC EMULATOR V.2.31 (WB3 only) SVGA PC emulator
U650 COPY & CRACK TOOL 2 more powerful copy programs
U669 S-KICK various version of kickstart, recommended
U680 NEW SUPER VIRUS KILLER (not WB3) kill 316+ viruses
U682 ASTRO 22 V3 latest Calculate star/sun positions
U685 DISK MANAGER V3 create catalogues of all your disks
U687 AMOS PROFESSIONAL UPDATE added extra command
U689 FORCASTER V2 - horse racing prediction program
U690 ASSASSIN COPIER (lots) includes Xcopy3/dcopy etc
U691 ASSASSIN HANDY TOOL 2 (500 1.3 only)
U692 ASSASSIN HANDY TOOL 3 more utils
U693 ASSASSIN HANDY TOOL + even more utils
U694 SUPER DUPER 3. (NOT WB1.3) V.fast disk copier
U695 P.C.Q complete Pascal language with compiler
U696 AMITOOL PROFESSIONAL disk database tool
U699 MEGACHEAT V3 + even more game cheats
U700 ANIMATION CONSTRUCTION KIT V1.2 + good
U702 V MORPH V2.create smooth morph animation
U703 POOL TOOLS 2 (Latest) predicts horse racing
U705 TRONI-CAD - best creative circuit board+examples
U707 GAME TAMER (3 & 4) - (2) Even more games cheats
U708 LAST WILL & TESTAMENT - write your will
U710 PERFECT-PAINT 32 Very easy to use paint packages
U713 CDTV v2 PLAYER play CDs while in workbench
U714 ENGINEER KIT various test kits for Amigas
U718 MAGNUM 1.9 REGARD the best disk magazines creator
U721 FONT FARM V3 + loads of fonts + font viewer
U723 EXOTIC RIPPER rates as the best sound/graphics riper
U724 PARNET SET UP (2) requires for the connection
U725 PARNET CABLE MAKER INSTRUCTION project save ££££s
U728 AREX MANUAL (not WB1.3) complete manual. Highly rec
U729 ASSASSIN BOOT UTIL 50 boot block creator utility
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U738 S.KICK PROFESSIONAL v3.2 Various versions of K-start
U739 TURBO IMPLODER V3.1 powerful disk cruncher
U740 CROSS DOS 5.1 plus read/write PC<->AMIGA disk
U741 HD-DISK TOOL BOX + many more Disk util recommend
U742 HOW TO CREATE AUTOBOOT DISK complete + util
U743 UTIL. Disk Maker v3. MAKE AUTO BOOT DISK
U744 FRACTAL MANIA+BIOMORPH Brilliant collection
U745 AF WORKBENCH (WB 1.3 ONLY) replacement
U746 3D GARDEN DESIGNER can view from any angle brill
U747 ASTROMY V2 predict star planet prediction
U748 ILLUSIONS DRAWING program like Dpaint
U749 DISK REPAIR 3 (floppy & HD) include soft-protect.
U750 MUSIC CATALOGUE (not A500 1.3) very easy to use
U751 SYSTEM CHECKER TOOL must for any Amiga owner
U752 EPU STACKER double the storage of your DRIVE
U753 HARD DRIVE UTIL+ lot more Hard drive util
U754 PARBENCH installer (complete)
U755 PRO CAD electronic latest circuit board designer
U758 WB MENU LAUNCHER - menu system, easy to use
U760 ICON PLUS (3 DISKS) Hundreds of stunning ICONS
U761 RELOCKIT 1.4 latest WB1.3 emulator
U762 FAKE FAST MEMORY make older softwears run
U766 MICRO FAX 4 (2) project (build a fax machine)
U777 TELETEXT RECEIVER project. Highly recommended
U781 DOSTRACE V2. display information why some program refuse to run. Also monitor Amiga activity. RECOMMENDED
U783 POOL WINNER GOLD must for all gambers
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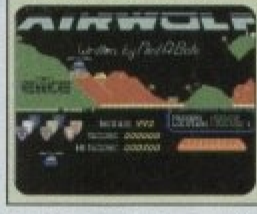
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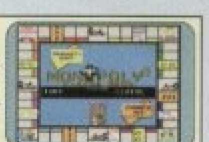
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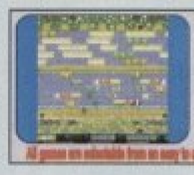
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AGA41 GIF BEAUTIES (1-18) pictures of raunchy women who don't seem tobe wearing many clothes
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AGA64 BODYSHOP 2 (2D) More of above
AGA66 BODYSHOP 3 More of above
AGA68 BODYSHOP 4 (2D) More of above
AGA70 BODYSHOP 5 (2D) More of above
AGA72 BODYSHOP 6 (2D) More of above
AGA74 BODYSHOP 7 (2D) More of above
AGA80 FITCHICK 1 See BODY SHOP for description
AGA82 FITCHICK 2 (2D) See AGA41 for description
AGA84 FITCHICK 3 (2D) See AGA41 for description
AGA90 ASSASIN A1200 FIX DISK 1-Brilliant collection of degrader that should get most of the old A500 games/software to run on the A1200. A must for anyA500 owner just upgrade to an A1200 - RECOMMENDED
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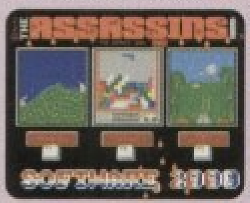
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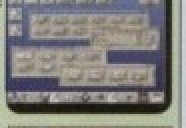
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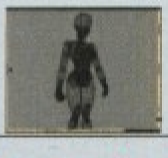
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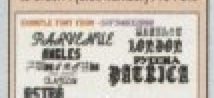
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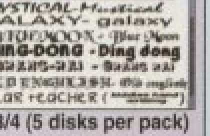
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High power tower



Do you want more from your A1200? Darren Evans checks out a new product which adds Zorro slots to the A1200

There's no doubting that the A1200 is a powerhouse computer in itself, but if it had a weakness it would be in the upgradeability department. Owners of machines like the A3000 and A4000 have had the luxury of a barrage of Zorro slots, into which they can plug in the many weird and wonderful upgrade boards on the market which further boosts their machine's performance. Such upgrade boards include graphics cards, accelerators, SCSI cards and more.

Okay, so A1200 owners have their own upgrade boards which fit into the trapdoor slot, but it is only one slot and it's a far cry from the versatility Zorro slots provide. There's also the PCMCIA slot you might say, but PCMCIA products are not exactly flooding the market and again, there is only one slot.

Thankfully, Power Computing can supply all you ➤

power-hungry A1200 owners with a product which not only gives you five Zorro II slots, it also looks neat and creates more room on your desktop to boot.

The solution to this path to power comes in the form of the Tower A1200, a modified PC mini tower case into which you place your A1200 motherboard. A simple idea you may think, but the really clever part comes in the form of the supplied busboard which houses five Zorro II slots.

This busboard is connected to the A1200 motherboard through an adapter which plugs into the A1200 trapdoor connector. The adapter also has a pass through slot which allows you to still use standard A1200 trapdoor upgrade boards.

The actual busboard is relatively simple in design, due to the fact that the A1200s trapdoor connector is really a modified Zorro slot in itself – therefore the busboard circuitry mainly deals with addressing multiple slots.

The tower case is a sturdy beast and it saves space thanks to its small 'footprint' on the desk. Or, better still, you can simply put it to one side under the desk. When not in use, the external keyboard can simply be stood on its end and placed out of the way. This is much neater and tidier than the A1200 and its collection of cables cluttering up the desk.

Hidden at the rear of the case you will see that all the necessary holes have been cut to fit the A1200's various ports, such as the mouse and serial port. There is even a slot cut into the case for A1200 accelerator cards which have optional SCSI interface connectors, plus there are the six slots which house the external connections of any Zorro expansion cards you have plugged in. Strange considering there are only five Zorro slots.

Also at the rear is a cooling fan and the keyboard connector for the external keyboard. You have two choices regarding the

Zorro slots, wassat then?

Once upon a time, when some Commodore engineers were designing a neat bit of kit called an Amiga 1000, they decided that it should have expansion slots to allow users to easily upgrade their computer with cool third-party peripherals.

Strangely enough, and for reasons known only to themselves, they named their slots after an equally strange sword-wielding television hero of yesteryear called Zorro (funny lot these technical bods).

Of course, as is the case with computers, no sooner do you have one when you suddenly find that another model has been released which is superior to yours. Hence the Amiga 2000 was born, and, along with it, the Zorro slots were updated and renamed Zorro II, providing even higher data transfer speeds.

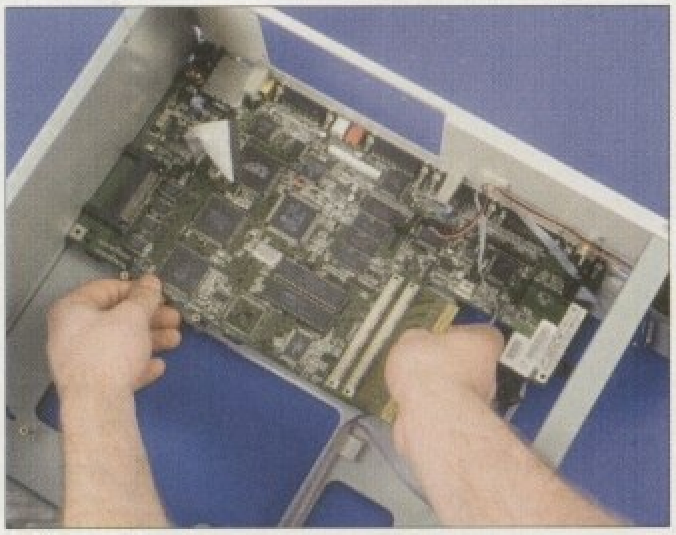
As technology advanced at its usual relentless pace, graphics chips and hard disks became even more powerful and fast and, yes you guessed it, Zorro II slots were superseded by Zorro III slots. These could handle the huge amounts of data which very fast hard drives and new graphics chips could chuck out and could also cope with much larger amounts of RAM on memory upgrade boards. Thankfully, many of today's higher quality expansion boards are both Zorro II and Zorro III compatible. Yippeee.

So, what does all this mean to the prospective buyer of this tower system? Well, if you want to have access to all those Zorro expansion boards on the market, you have to bear in mind that there are many boards which are Zorro III only, such as the DKB 4091 SCSI host adapter, and therefore will not work in your tower system's Zorro II slots. So, if you have a product in mind, be sure it says it is Zorro II compatible.

Also, with the DMA conflict between Zorro boards and standard A1200 trapdoor expansion boards, you will have to pick and choose your configurations to avoid this. In short, check with the supplier for any possible conflicts between the cards you intend using.

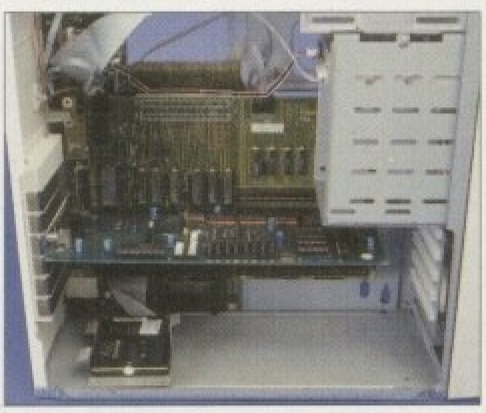
Step by step


Apart from some boring nuts, bolts and screws, the Tower A1200 consists of these three main components which will turn your A1200 into a real power beast.


After removing your A1200's motherboard it is transferred to the Tower case and screwed into place. Notice the adapter (right hand) plugged into the A1200's trapdoor expansion connector. This connects the busboard to the A1200 motherboard


With the A1200 motherboard in position and securely screwed down, the Zorro slot busboard is plugged onto the motherboard via the adapter


Things are looking cool already. As you can see, the floppy disk in the drive cage is poking out through the drive bay slot nice and flush


Now it's simply a matter of connecting the various plugs and leads to your drives and the motherboard and busboard and you're nearly there. Notice the already installed 24-bit Zorro expansion card. Try fitting that into a standard A1200, matey!


The front controls of the tower case include a clock speed display, power, turbo and reset button. There are also five more drive bay slots for additional peripherals

keyboard. You can either opt to use your A1200's unit, which then fits into an adapter case, or you can choose a PC-style keyboard for an extra £29.95, to which the Amiga's unique keys are mapped to the PC layout.

At the front of the case are three 5 1/4 inch drive bays and five 3 1/2 inch drive bays. Three of the 3 1/2 inch bays have blanking plates opening to the front of the case, with the other two only useful for fixed drive mechanisms that don't require external access.

Accompanying the drive bays is the LED display showing power, hard disk activity and the machine speed in megahertz. Two large and ominously black buttons marked Reset and Turbo can be found here as well. The Turbo switch can presumably be wired to any accelerator card to switch between speeds, although there was no mention of this in the manual.

DISPLAYS

The LED speed display is a three digit affair with the first digit used to indicate floppy disk activity. All these front displays and controls are housed behind a nifty little door.

Available as an option is an internal 230 watt power supply unit (PSU) to replace the A1200s paltry 25 watt standard supply. This is much more powerful than the A1200 PSU and is a must for those who want to utilise their Zorro capability to the full. Without it, the poor old A1200 PSU can only dish out enough power for a maximum of one expansion board in a Zorro slot – any more and it just doesn't have the juice to hand and will just present you with a blank screen when you switch on the power.

This higher-powered PSU, costing £99.95, plugs directly into the Zorro busboard and will happily supply the electrickery for your complete system, including all five Zorro slots and their contents.

Overall, the system worked well, but there are a few points to bear in mind before you make your buying decision. First of all is that although provision is made to plug in your existing A1200 trapdoor expansion boards, courtesy of the through port on the connector which sits between the A1200 trapdoor connector and the Zorro busboard, there is a technical conflict which exists with DMA access.

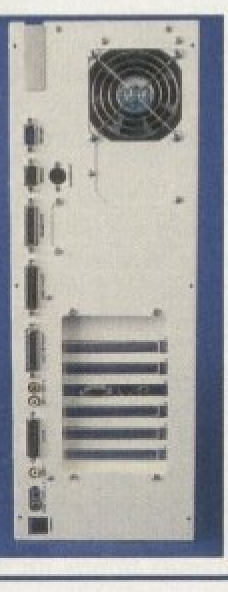
If your A1200 expansion card utilises DMA access, any Zorro expansion card which also utilises DMA access during its operation will be prevented from DMA access while the A1200 expansion card is plugged in. In other words, it won't work.

Once you have installed your A1200 motherboard into the tower case, the PCMCIA expansion port is useless because no external access to the slot is provided. In fact, the PCMCIA slot is directly flush with the base of the tower case, so those with products like the Squirrel or Zappo CD-ROM peripherals which fit to the PCMCIA will not be too pleased here.

For those with internal IDE drives in their A1200, there is no data cable provided to allow you to mount the drive in one of the drive bays. I had to simply use the ridiculously short data cable which came with my IDE drive and rest the drive itself on the bottom of the tower case.



Any computer is pretty useless without a floppy drive. So, it's time to put the floppy disk into the tower case's drive cage and slot it into position



A quick peek around the back of the tower case reveals the various standard A1200 ports, cooling fan, plus the all-new Zorro II slots ready for those juicy expansion boards

SAFE AND SECURE

Paranoia finally overcame me with visions of the drive sliding around and possibly touching live components on the A1200 motherboard, so I decided to secure the beast using good old Blu-Tak. It works quite well too, but I would much rather have the damn thing screwed securely into a drive bay. A strange oversight methinks.

Also remember that you get Zorro II slots with this system and there are many boards out there that are Zorro III only. You would therefore be wise to first consider what Zorro expansion cards you want and check that they are Zorro II compatible.

If you also wish to mix your existing A1200 expansion cards with your Zorro boards, it is wise to check with the supplier first that the DMA conflict will not prevent you from using them both at the same time.

The actual installation process was fairly straightforward, no thanks to the horrendously inadequate and badly translated manual. As long as you have some electronics knowledge with a dash of common sense, you should have little difficulty. There isn't even any soldering to be done. All you need is a good set of screwdrivers and pliers.

If you are not at all electronically minded, I would urge you to beware. The manual isn't really concise enough for novices and when it comes to messing with your A1200's innards, you can damage delicate components beyond repair.

> The tower case is a sturdy beast and it saves space thanks to its small 'footprint' on the desk

The Tower A1200 certainly works well despite some of its drawbacks and it performed admirably with a RAM expansion board and EGS Spectrum 24-bit graphics card sitting nicely in the Zorro slots. Ultimately though, to get your hands on Zorro capability, the choice is between this upgrade path and buying an A3000 or A4000, and it all comes down to your individual needs. Bear in mind that you can get hold of an A3000 with '030 processor, 4MbRAM and 214Mb hard drive for £999, and that comes with the latest Zorro III slots.

The Tower A1200 with 230 watt PSU will cost you about £599 and with second-hand A1200s selling for about £200, you could sell your existing computer and for roughly £200 extra, buy a new A3000 off the shelf. The choice is yours.

AC

Safety first

Before embarking on any project which will have you handling any electronic circuitry, you should heed the following safety tips:

1. If you don't have any basic electrical knowledge or experience in handling electrical components, stop here. You can damage both yourself and your A1200 (possibly irrevocably). Get someone with experience to do the job.

2. Electricity is lethal, especially when it is passing through your (very conductive) body unhindered. So make sure all electrical supplies are unplugged.

3. Electronic components are delicate creatures, as they are extremely averse to static electricity and regula rly die when they come into contact with it. If you want to have a fully working Amiga computer after building the Tower A1200, be sure to wear a good quality earth strap to keep nasty Mr Static at bay. Such earth straps are available from most good electrical stores.

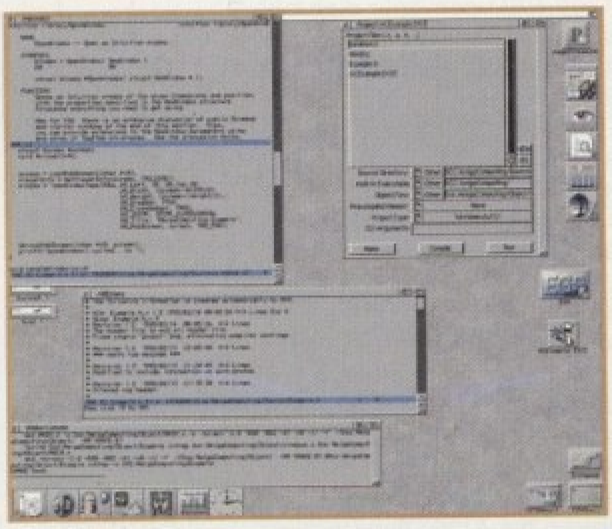
The bottom line

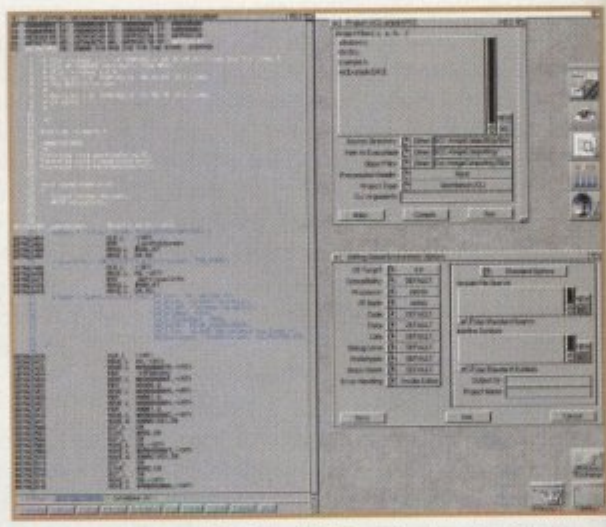
Product: Tower A1200
Supplier: Power Computing
Price: £499, £598.99 with optional 230 watt PSU
Tel: 01234 273000

Ease of use	**7**
Implementation	**8**
Value for money	**6**
Overall	**7**

Raising the stakes

Now you can get your hands on a professional pro-quality C compiler in the form of DICE, an essential piece of software for any serious coder. Nik Lines takes a gamble and has a look


This shows DICE's operation. Edit and make from one place


The debugger running in 'mixed' mode showing C and 68000 interleaved and one page of the options package

Since last April, some Amiga developers have been a bit nervous. The reason? The company SAS decided to drop the Amiga version of SAS/C, effectively removing one of the main development platforms on the machine and leaving users of the system with bugs that will not be removed.

However, all was not quite lost. Matt Dillon's shareware compiler, DICE, was gaining so much support that it was decided to really work for version 3 to create the ultimate C package. This was no small undertaking and hence the package has moved to the commercial world under the wing of Obvious Implementations Corporation.

It used to be the case that you could only get the commercial package directly from the States, which not too many Europeans were eager to do. That is, until Fourth Level Developments took on UK distribution, along with a fairly sizeable chunk of Europe for good measure.

With a minimum of persuasion, a review copy was promptly forthcoming from Fourth Level and soon five disks and a chunky manual arrived on the desk. Packed onto these disks is an impressive range of stuff including the compiler, a source level debugger, visual make utility, code profiler, two editors, Commodore Include files for versions 1.3, 2.0 and 3.0, essential utilities such as enforcer, support utilities and a multitude more.

The manual makes a refreshing change too as it is made less daunting by the inclusion of a cartoon on the cover which somehow convinces your eyes that the inch and a bit thickness really isn't going to be that bad.

DICE is designed to work not only on high-end machines with X Gigabytes of memory and more hard drives than you can shake a stick at, but also on a more modest two drive, 1MB system – it is the maker's intention to continue this support while adding to the features of DICE.

Installation is achieved through the standard Installer utility for both hard drive and floppy users. Options on the completeness of installation are given, along with a choice of which version of the Include files you want to use. This section passed without a problem. Once installed, a hulking great ReadMe file is thrown at you containing details of bug-fixes, known bugs, release notes and a licensing agreement which could teach Satan's little workers a thing or two about contracts. From this point on, you're on your own to a large extent.

INTRODUCTORY COURSE

Thirteen example projects are included to introduce you to the joys of VMake and I'll admit to feeling a little bit lost at this point and longing for a tutorial. However, things soon cleared up (as good Doctors say) and my eyes were opened to something that will probably revolutionise the way in which C programmers work. Just what VMake is is difficult to pin down in words, but basically it's a complete windowing environment that can integrate the DICE package together visually, therefore eliminating the need to remember CLI options for compilers, linkers, debuggers and more. I say 'can' because DICE can also be used from the CLI by those who want to.

Despite this inclusion, I suspect even the most die-hard shell addict will give in and use VMake – it really is excellent. It pulls the whole of DICE together so well that the reference section of the manual seems a little superfluous.

The best way to describe DICE's operation with VMake is through an example: To start your project off, simply give the name of the executable file you want to build. Next, add the names of files you want to be part of the package. After that, double-clicking on these names brings up the

A good read

The manual deserves a mention, too. Despite a C compiler being one of the most boring products known to man (or woman), the authors have managed to keep the style light yet informative, while retaining the technical side too. This is quite an achievement and is probably helped by little humorous bits which are well placed so as not to annoy even the most serious of techy nerds. "This is a test of the emergency page blanking system. This is only a test" provides more of a grin than "This page is intentionally blank" ever could.

For reference it is spot on, but for a newcomer to the package it would be nice to see a few pages by way of a tutorial, explaining RCS and VMake by example. The fact that it's spine bound and not ring bound is a marginal niggle too: The review copy now has numerous Post-it notes acting as bookmarks for the most referenced pages.

Overall, the level of integration and sheer completeness of the whole system impresses me. People who have used Turbo C on a (shudder) PC will know just how easy managing a large project in C can be – DICE makes the task even easier.

AMIGA BLUE CHIP AWARD

Glossary

RCS – Revision Control System, used to keep track of multiple versions of a file. Used world-wide, not just for C programs either.
***nix** – One of the many 'flavours' of the Unix(tm) operating system.
Linked library – a file that contains precompiled functions which is joined to the user's files.

system's default editor to edit them. Once happy with your modifications, you can choose to bring RCS (Revision Control System) into play by 'Checking In' your file, but you don't have to use this if you don't want to.

When everything's hunky dory, click on the make button and watch the program compile without having to touch a makefile! All dependencies are worked out for you and better still, prototypes are generated automatically, thus eliminating the need for manually transcribing the functions from each of your files into one file for inclusion.

As mentioned above, RCS is included with DICE and is completely integrated inside VMake. For those not familiar with this tool – and I wasn't – it is certainly worth the ten minutes it takes to get it working. RCS has been ported from the *nix world and simply keeps track of revisions of your source files.

CHECKING OUT

Before editing a file can be done, it must be 'checked out' of the RCS system. When editing is finished it is checked back into RCS and the program prompts for a revision comment, which is logged along with the date and revision number. Special RCS keywords can be embedded inside source code to be expanded, showing the author, history, creation date and more – again this is automatically done.

Best of all, if something with your latest version has gone horribly wrong and you suddenly find you need to get back to four previous revisions, you can save your hair, sanity and Amiga from abuse. RCS keeps track of all changes made by storing the differences from revision to revision, allowing earier versions to be reconstructed. In short, RCS is pretty invaluable and using it within VMake is a doddle.

When errors do crop up in your code, VMake drops you into the editor of your choice, telling you what the problem is and where to find it. With the AME editor (an Amiga specific enhancement of the *nix memacs editor which is DICE's default) multiple files can be edited at the same time, so you can flit happily between your error log and source code file.

Any ARexx knowledgeable editor can be integrated into the DICE package – configuration files are provided for CED, ED and a few others along with instructions on how to make another editor of your choice work well with the DICE system.

While on the subject of editors, it's worth mentioning another corker of a utility that DICE comes with: DiceHelp. This package integrates with your editor using AREXX so that when the cursor is over a function call (for example, OpenWindow), the program will search out the information from any autodocs that you have on your system and display it in another window. It also finds help on all DICE link library calls, too.

> if something with your latest version has gone horribly wrong and you need to get back to four previous revisions, you can save your hair, sanity and Amiga from abuse. RCS keeps track of all changes made by storing the differences from revision to revision, allowing earier versions to be reconstructed.

Pretty much every aspect of the system is configurable from VMake. By using the Options sub-program, the majority of flags for each stage of compilation can be set such as target OS, target processor and so much more. The list is endless; suffice to say, you really shouldn't need to touch the CLI no matter how hairy you want to try and make things, even if you want to generate code to be burned into ROMS on a system other than an Amiga!

Programs can also be compiled to produce run-time profiling information to give a full view into how many times a function is called, how long each call takes, where it was called from, who it calls in turn and overall execution time. This claims to be accurate to 20 microseconds and provides you with a mine of information.

The source level debugging tool (DD) can be invoked from VMake too, simply by pulling down a menu item. As debugging goes this is pretty good. Breakpoints can be set at source, the produced machine code can be viewed (and interleaved with the C if wanted), commands can be stepped through or over, making this a very powerful tool.

For speed freaks, compilation can be sped up by precompiling header files. A support program called DiceCache allows for files with a certain suffix to be cached for use with DiceCache aware programs (such as the whole DICE suite). Support is also provided for programmers wishing to exploit DiceCache too.

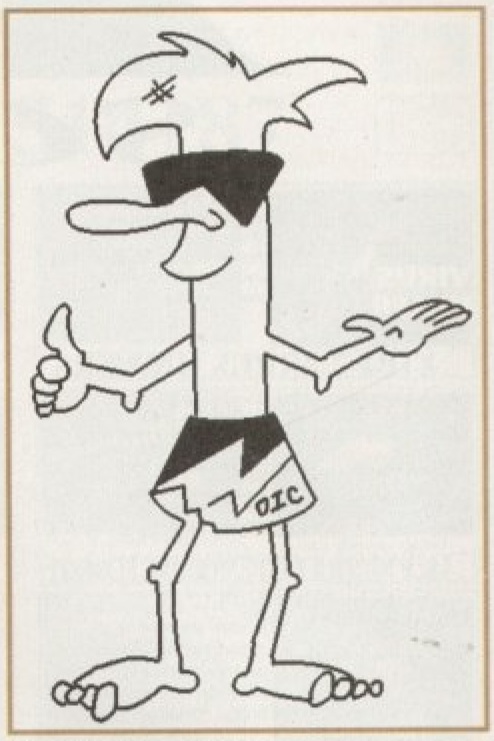
The support tools also include a file compression utility which really makes floppy running a viable alternative. Instead of Commodore's include files taking up one disk to themselves, they are compressed down to less than half a disk.

SIMILARITIES

This seems to work in much the same way as disk expander, as compression is invisible to the operating system. Another nicety that I immediately fell for was auto opening of libraries. DICE's linked libraries intelligently open system libraries as needed and tidy up after themselves too.The compiler itself seems respectably fast, much the same speed as SAS/C until DiceCache is enabled when everything can get pretty nippy. DICE provides compatibility with a whole host of other systems, ranging from SAS/C and MANX to *NIX. The link libraries are also pretty rice, with a whole host of functions providing *nix code compatibilty.

Amiga specifics are also well catered for and it was nice to see that the example projects included a DOS handler, an exec device, a printer driver and a library.

While comparing with SAS/C, when I tried recompiling the Tabby driver an annoying bug concerning stack handling



The DICE logo – not sure about it's relevance though

disappeared – one down, only a few left to go... Bugwise, it was nice to report that DICE appeared very stable; the only problem I had was a crash when exiting the debugger while the program I was debugging had not completed. This probably wasn't a bug in the tool but more of an oversight on my part. review copy now has numerous Post-it notes acting as bookmarks for the most referenced pages.

Overall, the level of integration and sheer completeness of the whole system impresses me. People who have used Turbo C on a (shudder) PC will know just how easy managing a large project in C can be – DICE makes the task even easier.

Verdict

For a C development kit, you probably can't do better. The integration is superb, it does a good job of compiling and it's half the price of its now unavailable main rival!

The bottom line

Product: Dice 3.0
Price: £129.25 (Student discounts are available)
Supplier: Fourth Level Developments
Tel: 0117 955 8225,
Fax: 0117 955 9157
E-mail: dicecsales@flevel.demon.co.uk.

Ease of use	**9**
Implementation	**10**
Value for money	**10**
Overall	**10**

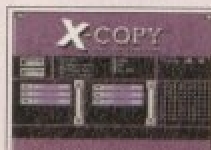
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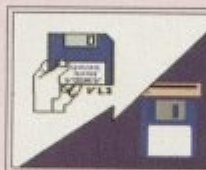
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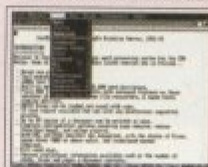


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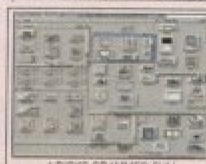
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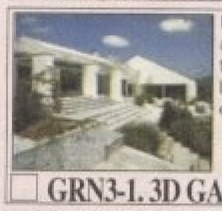


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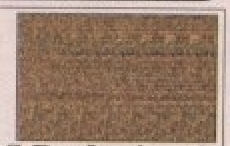


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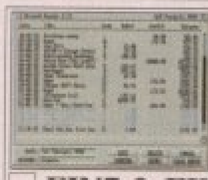


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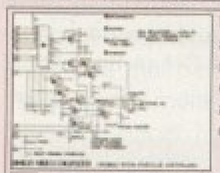
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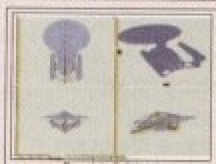
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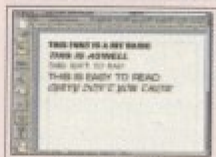
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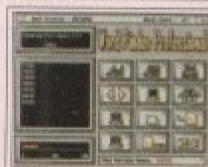
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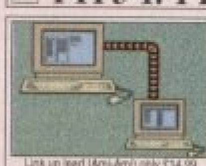
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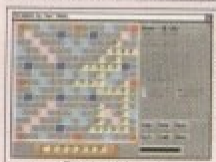


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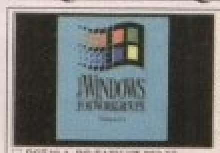


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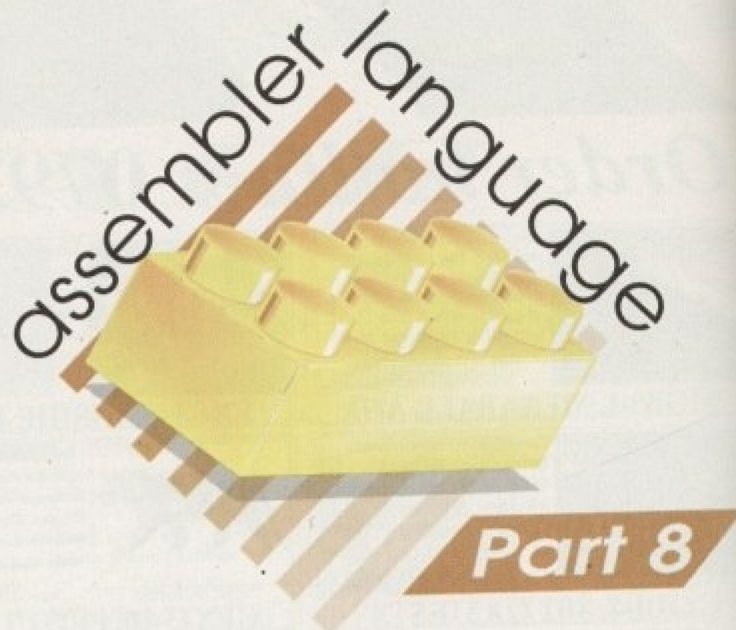
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This month Paul Overaa provides some runable code to drive home those coding conventions and tag list discussions he's been dealing with over the last couple of issues



Actions speak louder than words

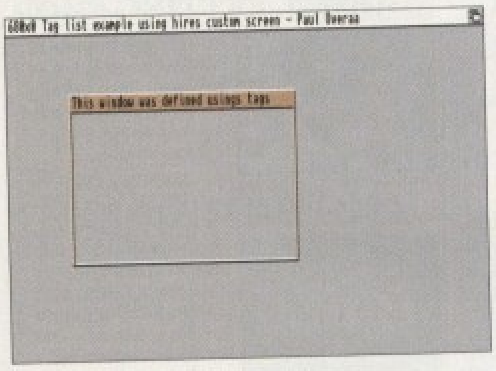
On the last instalment I promised to show some tag list functions in action and this month's example does exactly this, setting up and using tag lists which define a window and a high resolution custom screen. In its current form the program is extremely simple but, as with previous examples, I've opted for producing a piece of code that can be built upon in subsequent instalments.

This means that understanding the overall framework of this month's code is important – it stands to reason that if you can appreciate what the code is doing while at a relatively simple stage of preparation, subsequent additions will undoubtedly be easier to get to grips with.

However, first and foremost this month, I will deal with seeing tag lists in action and in this respect you already know 90 per cent of the story. Using tag functions themselves, as we saw last month, is easy and in fact the only area where care needs to be taken is in getting the right tag definitions set up in the first place.

Some tag list-based functions can, incidentally, ignore nonsensical tag values, but as a general rule it is safer to assume that using any tag function with the wrong tags will have the same effect as, say, making a conventional library function call using the wrong parameters. In short – you should expect your machine to Guru!

Listing 1 shows the screen and window tag lists used in the example and when you examine the CoverDisk code, you will notice that tag identity values have been defined at the start of the source. There's nothing mysterious about me choosing to create tag definitions like this rather than using the official Commodore include file definitions – I've done it in order to make it easy on those of you that do not have the official includes.



This is what you'll see when you run the screen/window demo code

IDENTITIES

By incorporating my own tag identity values it becomes possible for everyone to assemble the code, irrespective of whether they possess the official includes or not. (Since my definitions are identical with those provided by Commodore anyway it is actually a perfectly straightforward task to modify my source so that it uses the official definitions instead).

The fragments shown in listings 2 and 3 perform the job of opening a screen and a window respectively, and you'll find details of the actual tag routines being used in the function call box outs. These should be self-explanatory if you followed the ideas presented in the last instalment. This area of the code should have a familiar ring about it for another reason because I'm using exactly the same allocation/deallocation arrangements that have been used in previous examples.

If you are a new reader seeing this type of code for the first time, then here's a brief recap on the ideas: All allocation operations are coded in such a way that, providing they are successful, the address of any corresponding deallocation function gets pushed onto a special 'deallocation stack'. When the program terminates these addresses are removed and the associated routines executed.

This approach causes all required deallocation operations to be performed in the reverse order to those used for the original allocations, and this is normally the way things should be done. If you want the full nitty gritty details of this particular trick you can get them from the October '94 issue of *Amiga Computing*!

Table 2 gives an outline of the various sections of code you'll find on the CoverDisk. Notice that, as with previous examples, I have coded the library opening

The main controlling code

The opening of the screen and window involves sub-routine (jsr) calls to the tag list routines already mentioned, and the block of code that controls this screen and window opening is very straightforward:

```
jsr      OpenScreen
beq.s    closedown
jsr      OpenWindow
beq.s    closedown
jsr      TimeDelay
```

The time delay has been used to allow the screen and window to remain open long enough for you to see them – and perhaps move the window around using the mouse. Although previous issues have dealt with Intuition menus and event handling, I've chosen the time delay approach in order to minimise the amount of code you have to look at. After all, the primary purpose of this month's example is to illustrate some tag list functions and to be honest, I didn't think it would be a particularly good idea to clutter an essentially simple piece of code with relatively complex menu and Intuition event handling routines.

The time delay, incidentally, has been created using the Delay() function from the DOS library. We simply load register d1 with the number of ticks required (50 ticks= 1 second) and call the Delay() function. My code uses this sub-routine to achieve this:

```
TimeDelay   movem.l   a0-a1/d0-d1,-(a7)   preserve regs
            move.l    #TIME_DELAY,d1      load time delay
value
            CALLSYS   Delay,_DOSBase
            movem.l   (a7)+,a0-a1/d0-d1   restore regs
            rts
```

Well, that's about it for this month. You'll find all the accompanying source code on the CoverDisk along with a start-up linked executable version which you can double-click on to run!

```
screen_tags dc.l        SA_DisplayID,HIRES_KEY
            dc.l        SA_Title,screen_name
            dc.l        SA_Left,0
            dc.l        SA_Top,0
            dc.l        SA_Width,640
            dc.l        SA_Height,200
            dc.l        SA_Depth,3
            dc.l        SA_Pens,screen_pens
            dc.l        TAG_DONE,NULL

window_tags dc.l        WA_CustomScreen
screen_p    ds.l        1
            dc.l        WA_Left,0
            dc.l        WA_Top,0
            dc.l        WA_Width,320
            dc.l        WA_Height,100
            dc.l        WA_DragBar,TRUE
            dc.l        WA_Title,window_name
            dc.l        TAG_DONE,NULL
```

Listing 1: Magic tag lists that define the example screen and window characteristics!

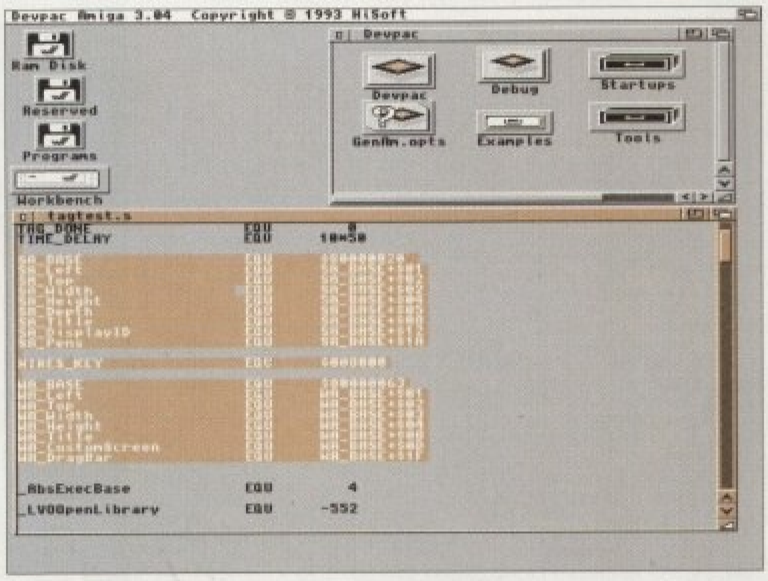
```
Function Name:   OpenScreenTagList()
Description:     Opens screen using NewScreen &/or tag list data
Call Format:     screen=OpenScreenTagList(new_screen,tag_items)
Registers:       d0                       a0                    a1
Arguments:       new_screen - pointer to a NewScreen structure
                 tag_items - pointer to a tag list
Return Value:    screen - address of screen (NULL if function fails)
```

Description of Open Ssreen Tag List routine

```
Function Name:   OpenWindowTagList()
Description:     Opens window using NewWindow &/or tag list data
Call Format:     window=OpenWindowTagList(new_window,tag_items)
Registers:       d0                       a0                    a1
Arguments:       new_window - pointer to a NewWindow structure
                 tag_items - pointer to a tag list
Return Value:    window - address of window (NULL if function fails)
```

Description of Open Open Window Tag List routine

louder



Because all tag definitions have been included in the source you do not need to have the official Commodore include files to assemble this example

and closing operations using loops. This technique was first dealt with in the September '94 issue but, since the library opening loop can be a bit of a nightmare for the uninitiated, I'll briefly recap on the general ideas for any of you seeing this type of code for the first time.

Pointers to the first library name and the first library base are loaded into registers a2 and a3, while d3 is loaded with a count one less than the number of libraries to be opened – because the automated dbeq instruction actually counts down to -1 if the loop goes to completion. Immediately after these initial values have been set up, a loop is used to open all the libraries, resulting in the code that handles the library opening looking like this:

```
_main       lea         lib_names,a2
            lea         _DOSBase,a3
            move.w      #(LIBRARY_COUNT-1),d3
loop counter
.loop       move.l      (a2)+,a1        library name
pointer
            moveq       #36,d0          min library
versions
            CALLSYS     OpenLibrary,_AbsExecBase
            move.l      d0,(a3)+        store
returned base
            dbeq        d3,.loop
```

Notice the use of indirect addressing with autoincrement instructions for copying the library names and returned library base pointers. With a2 for instance, which starts off holding the address of the first library in the list of library names (DOS library), this is what happens: The move.l (a2)+,a1 instruction copies the DOS library name pointer to a1 (in readiness for the OpenLbrary() call). After this register a2 is auto incremented by 4 so that a2 then points to the next library name to be used.

The loop terminates either with d0 holding the last valid open library pointer and d3 holding -1 or, if an OpenLibrary() call failed, with d0 holding 0 and d3 holding a loop count value between 4 and 0. The important point with all this, which you'll see if you trace through the loop code, is that as soon as a library open error occurs the loop quits with register (a3) pointing to the base of the library that failed to open!

To close any previously successfully opened libraries, all we need to do is use a backward reading loop to collect the valid library pointers already stored in the library base variables. When you examine the code on the CoverDisk you'll see that the library closing loop has been written as a sub-routine. This is because the code can be called under two different situations – when the program has run without error and all libraries need to be closed, or when there has been a library opening error and a fewer number of libraries need to be closed.

By testing the zero flag at the end of the library opening loop we can tell whether an error occurred and a conditional beq instruction then allows us to select either a normal or an error exit pathway. If you find this, or the stack-based allocation/deallocation technique, a little awkward to follow then just accept that this framework works and concentrate on appreciating the overall ideas.

General equates used by the program

Tag/Function constant definitions that duplicate material normally obtained from the official Commodore include files.
Function calling macro definitions
Library opening loop
Call to sub-routine for opening a screen
Call to sub-routine for opening a window
Call to sub-routine for producing a time delay
Closedown code
Support routines for opening/closing screen and window and producing a time delay.
Space for variables, Tag lists related to screen and window characteristics, and static text definitions required by the program.

Table 1: General layout of the example program

```
OpenScreen  movem.l     a0-a1/d0-d1,-(a7)       preserve regs
            movea.w     #NULL,a0
            lea         screen_tags,a1          start of tag list
            CALLSYS     OpenScreenTagList,_IntuitionBase
            move.l      d0,screen_p save returned pointer
            beq         .error
            move.l      #CloseScreen,-(a5)      push deallocation routine address
.error      movem.l     (a7)+,a0-a1/d0-d1       restore regs
            rts

CloseScreen movem.l     a0-a1/d0-d1,-(a7)       preserve regs
            movea.l     screen_p,a0 screen to close
            CALLSYS     CloseScreen,_IntuitionBase
            movem.l     (a7)+,a0-a1/d0-d1       restore regs
            rts
```

Listing 2: Tag routines for opening and closing a screen

```
OpenWindow  movem.l     a0-a1/d0-d1,-(a7)       preserve regs
            movea.w     #NULL,a0
            lea         window_tags,a1          start of tag list
            CALLSYS     OpenWindowTagList,_IntuitionBase
            move.l      d0,window_p save returned pointer
            beq         .error
            move.l      #CloseWindow,-(a5)      push deallocation routine address
.error      movem.l     (a7)+,a0-a1/d0-d1       restore regs
            rts

CloseWindow movem.l     a0-a1/d0-d1,-(a7)       preserve regs
            movea.l     window_p,a0 window to close
            CALLSYS     CloseWindow,_IntuitionBase
            movem.l     (a7)+,a0-a1/d0-d1       restore regs
            rts
```

Listing 3: Tag routines for opening and closing a window

E.M. COMPUTERGRAPHIC

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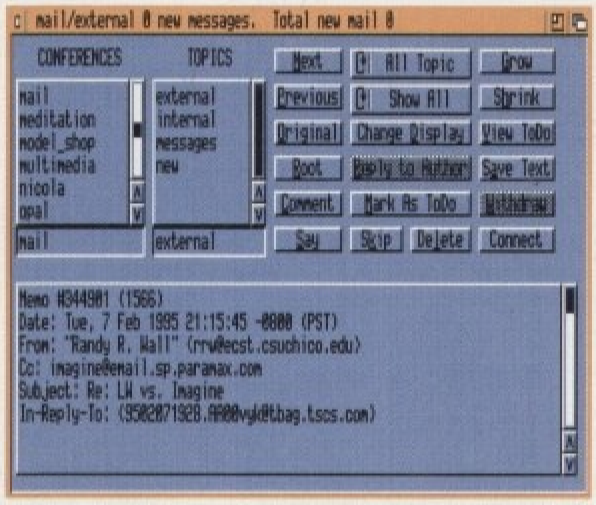
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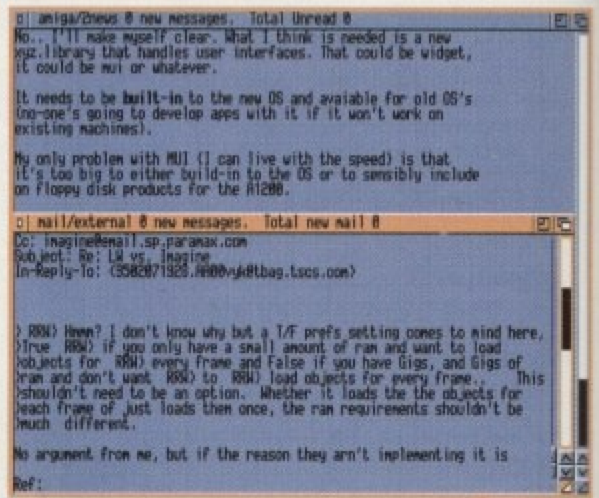
NO CATCHES!...NO SNAGS!...NO SMALLPRINT!

Get your CIX

Veteran CIX expert Phil South takes you on a tour of the UK's oldest, biggest, and some say best independent UK conferencing system



Send messages to whoever you like


You can say all you want about a topic without putting pen to paper

In the dark days when comms was just a hobby for weirdos with a 300 baud modem, Compulink Information eXchange was created to fill a need which didn't exist at the time. A large system in the USA called the Byte Information eXchange, or BIX, was the central meeting place for all computer types to meet and talk about things which concerned them, or swap ideas about what they were doing.

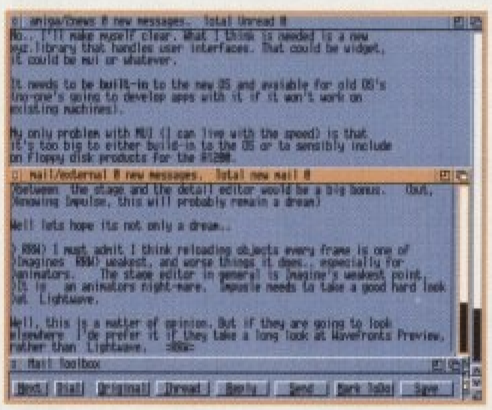
The point of BIX was that it was set up to hold conferences on different subjects and allow file transfer between BIX and users, and of course between user and user. The format was extremely successful and didn't go unnoticed on these shores.

The Internet wasn't available to anyone who wasn't connected to a mainframe, and BBSs, although prevalent, weren't central enough in the UK to provide a UK-wide service for all computer types to log on to and exchange ideas. Fidonet did provide some connectivity to the outside world, but the comms community in the UK was looking for a focus, somewhere to live.

HISTORY

CIX started 10 years ago, in 1985 for those of you who can't subtract, and was operated by the Compulink User Group. It was initially a BBS set up by a gent called Frank Thornley primarily to distribute and share PD and shareware between members of the group. It grew and grew over the years attracting more and more members, who in turn brought more shareware into the system, thus attracting more members.

An Internet feed for e-mail was added in 1988, meaning that users could send mail over the Internet, external mail it's called, to users outside the CIX host system. This was a big bonus to computer users (and young writers like me, well I was young then) who could now e-mail anyone in the world who had an address. The full Internet feed didn't appear until 1992, when it became possible to access anonymous FTP, e-mail, Gopher, and even the early text-based versions of World Wide Web. To bring us bang up to the present, at the end of February this year the service announced a full Internet feed with the ability to use graphics-based WWW browsers like Mosaic.


Inspire people with your knowledge

Although the system bears a striking resemblance to the BIX way of doing things, (even the name is similar) the system actually takes its structure from the software the system runs, called CoSy, written originally by the University of Guelph in 1984. The structure of CIX is that you have a main prompt, from which you can type a number of things, for example:

1. The name of a conference you have joined and enter it.
2. The name of a conference you are not joined to and join it.
3. "mail" to access your e-mail directory.
4. "go internet" to access the Internet, live, via FTP, telnet or gopher etc.

So basically you have a range of different

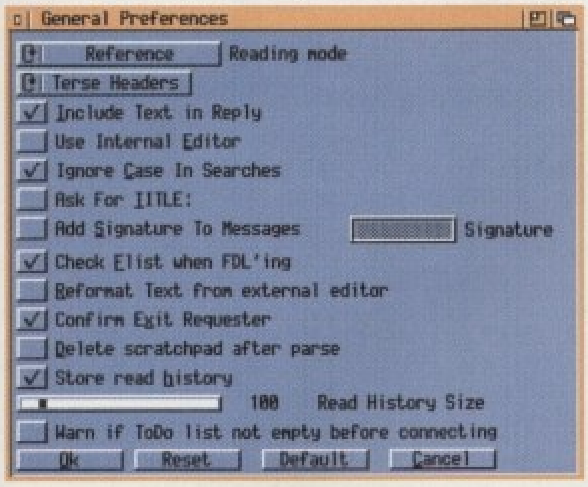
Wait a minute Mr e-mail

One of the reasons CIX caught on big time was that its e-mail was so useful. As it happened a lot of the early adopters and computer game writers took up with CIX early on as a means of talking shop, and the trend caught on to the degree that game developers, software houses, users and even Commodore got an account with CIX. E-mail, and its file-sending equivalent, binmail, or binary mail, became the most popular way of sending files and information around the country.

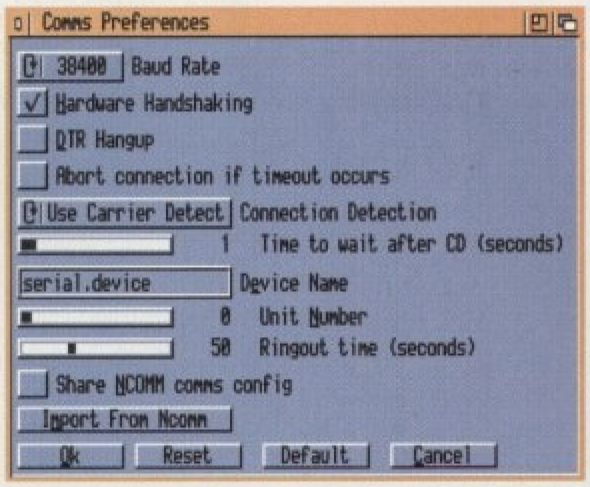
Binmail works by allowing each user to have their own private mail directory on the system, and you can upload something to that directory and then binmail it on to another user of the system. This is separate from the normal file transfer system, which involves certain conferences having file lists, or 'FLISTs' as they are called in CIX parlance. In a FLIST everyone on the conference can download and upload to the list, whereas a private mail directory can only be accessed by the user concerned.

File transfer, as this was one of the reasons for CIXs existence in the first place, is one of the main reasons that CIX is so popular. You can download from one of the biggest collections of shareware and PD in Europe, and all for the price of a phone call to one of the CIX nodes. Although CIX doesn't have Points of Presence like some systems, you can use the PSS system to access the system remotely. You can even telnet in from the Internet, as some users do, from anywhere in the world, provided you have an Internet account in your remote location, and you also have an account on CIX.

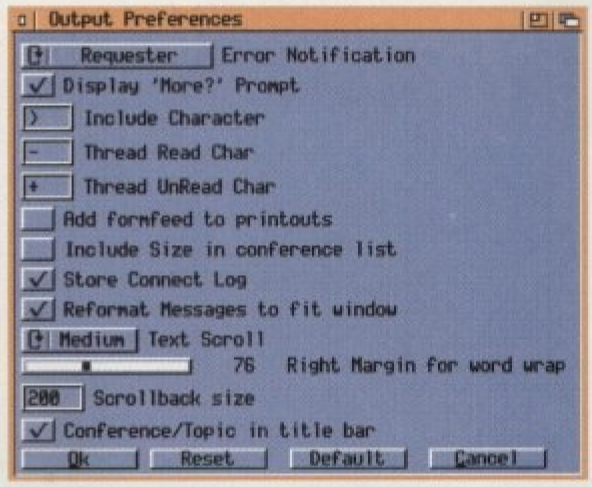
So you can be working in the USA temporarily, but you can still get onto CIX and take part in the conferences. This was shown recently when a couple of CIX users who live and work in Japan were reporting first hand about the recent earthquake in the japan conf, almost as it happened.



The General Preferences screen – adapt it to your own suiting...



...then do exactly the same for comms...



...and for your output preferences

What's the use?

There are a number of reasons why CIX is so beneficial to use. Firstly it is big, and has a lot of files. Secondly it contains a lot of people who create software, hardware, magazines, books and other stuff that you consume.

If you have any questions, such as on the Internet, then there will be some expert on hand to help you out. If you know about something then this is the place to help people who aren't as mind-bogglingly clever as you and up to your Olympian heights of intellect. Also, CIX has off-line reader programs, of which there are many for all kinds of machines. The CIX official OLR is on the PC and it's called Ameol. The best Amiga one I have used is called Nicola, and is available in an evaluation version on CIX. It allows you to log on, get your messages and conference lists, and then log off all automatically, so you can then read and respond to messages in all the confs you are joined to without spending a fortune on the phone.

subjects structured into conferences to which CIX subscribers can join. The only exception is closed conferences, into which you can only be invited by the moderator of that conference. It's like entering a room where a meeting is going on. If it's an open meeting you can walk right in uninvited. If it's a private talk, you had better keep out.

TOPICS GALORE

I said a range of different subjects just now, but how many subjects exactly? Coming up for 3,000, actually. Think of a subject. There should be a conference devoted to it. If there isn't, the beauty of it is that you can start one and become a conference moderator. This isn't as hard as it sounds, and you can easily be a good conference mod in no time.

It is a common thing for people to get on the system and wildly create a conference or three before lunch without consulting anybody, and these half-baked conferences lie about on the system for a while before being zapped by the sysops – unlike on the Internet where a newsgroup is forever!)

The best way around the problem is to consult with other people on the system. For example, if you had an idea for an Amiga-based conference, you should start by sending a message to the 'amiga' conference, asking if there is a topic on any CIX conference like the one you have in mind. Obviously, if it already exists there is no point in doing it again, and if nobody thinks it's a good idea then there is no point, as none of your target audience for the 'conf' will be interested either. If, however, everyone thinks it's a good idea and it hasn't been done before, then it's off to the moderator's blazer shop, at once. You are a 'mod.' No need for a scooter and a parka, though.

The one conf that everyone is joined to is cixnews. You can't resign from cixnews as it carries vital system information to the users.

The top ten CIX Confs

1. amiga	6. cdrom
2. amiga-3d	7. amos
3. lightwave	8. cyberpunk
4. cultmedia	9. japan
5. games	10. ufo

Need some help?

For more info write to, or call:

CIX
Suite 2, The Sanctuary
Oakhill Grove, Surbiton
Surrey KT6 6DU
Voice: 0181 390 8446

You can also join on-line by calling up the system (all speeds up to 14.4K baud) on: 0181 390-1255 (48 lines) or 0181 390-1244 (26 lines). Have your credit card ready. There are other lines for 28.8K baud and even ISDN!

Everything in moderation

Moderating confs is a rewarding experience, but as I pointed out earlier it's not something you should just barge into doing. A good moderator keeps a conf going by constantly prodding people along to talk about things, answering questions on the subject, if he or she happens to be an expert, and keeping the file lists up to date.

As a moderator you can create a conference, choose and create the 'topics' in that conference. These are like virtual rooms within the conference area, devoted to sub-topics about the general subject under discussion in the conf. You can select a topic to be a files topic, and attach the FLIST to that topic, control who stays on the conf, and can withdraw messages that are either off topic or offensive to other users. You can also make the conference closed if you wish, which means that only participants you wish to join can be involved.

SENSITIVE

This could be because the subject is a little sensitive, like homosexuality, and you want to vet the participants before they can contribute. Or it could be that the conf is a product support line for your software or hardware, in which case you only want registered users involved.

You might also be discussing things which are for the ears or eyes of developers only, subjects which might be secret from the press or the public, like the features of your new product, or anything which cannot yet be public knowledge.

You can get a full list of conferences by typing 'show all', and this will give you a listing (about 60 A4 pages long last count) of all the confs on the system, even the closed ones. They can be closed, but not invisible. Everyone has the right to ask you if they can be in your conf, but you have the right to say no.

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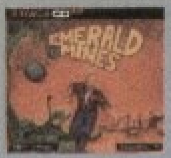
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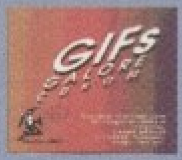
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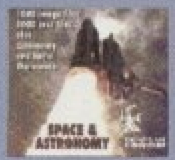
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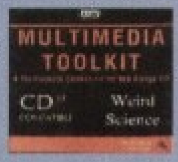
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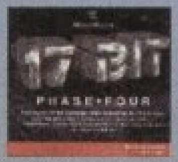
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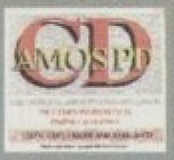
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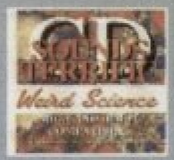
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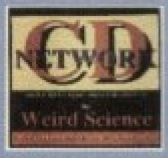
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SYSTEM

Your essential guide to Amiga gaming

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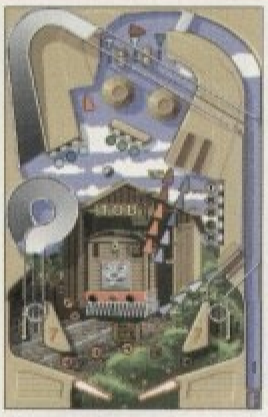
Flying High?

Can Rowan Software reclaim the flight simulation crown or will System shoot them down in flames?

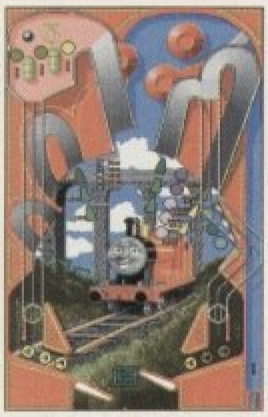
This month's System inspects

SYSTEM ANALYSIS

Alternative all tanked up



Thomas Electronic Pinball will be easy to control for the younger player



Expect to see other colourful characters from the series

Alternative Software have some imminent releases for the sports fanatics among you. Tracksuit Manager 2, the sequel to their football management sim, is due out soon, complete with a whole range of features including the facility to be able to compete in all English League and European Cup competitions. You can arrange pre-season friendlies, negotiate contracts and sign or sell players. Also, you'll be able to send your scout to sign new players both in England and Europe, and when it gets to match day you can watch the in-games commentary. Tracksuit Manager 2 will be priced at £25.99.

Their second sporty offering is Rugby League Boss, a management game that gives you the chance to try your hand at taking a rugby team to the top. Conference teams, as well as First and Second Division teams, are included so you can play them against each other. There are realistic details such as injuries, substitutions, sending offs and Sin Binnings. It promises "excitement to the very end."

And finally a very different sort of game is set for the Amiga in the shape of Thomas Electronic Pinball which, believe it or not, is a pinball game based on the popular children's character, Thomas the Tank Engine. The tables include other characters from the series too like James, Percy and Toby, and utilises an easy control system to make the game accessible for younger players.

system online



April is with us once again and with it comes plenty of new releases – which just goes to show that the Amiga owner is nobody's fool. Tina Hackett reports

More Manga mania

Manga Video have plenty of releases available at the moment for all fans of the genre. Ninja Scroll (certified 18) is set in feudal Japan and tells the story of a Ninja, Jubei.

Expect battles in space in Macross Plus: Part 1 which takes place 40 years after the original Macross. Written by Shoji Kawamori, it is a four part series and has authentic mecha designs.

Also, chapters 3 & 4 of The Legend of the Four Kings are being released which are based on an original novel by Yoshiko Tanaka and comes with an episode of Stigmata, the new comic strip by Jim Alexander and Steve Potter.

And finally, this month sees the last episode of The Guyver Part 12: Reactivation. Sho seeks revenge on the Guyver for the death of his friends in this last exciting instalment.

In Gremlin's shadow

Although Gremlin's Shadow Fighter didn't have the sort of pre-launch campaigns of its rivals, it is certainly making up for it now. Their recent publicity stunt at Meadowhall Shopping Centre was a real hit with the public who packed out the Sheffield shopping centre to see what their new beat-'em-up was all about, and meet Hunter from the Gladiators

Steve McKevitt, PR Manager for Gremlin commented: "The success of this event has surpassed all of our expectations. It's a credit to the popularity of the Gladiators and the quality of Shadow Fighter." It also marks the amount of interest still in the Amiga. Mark Mattocks, Marketing Manager stated: "It's fantastic when a promotion goes as well as this one has. This is the kind of event you'd normally associate with a console product, but we felt that maybe people were a little quick to dismiss the Amiga.

Initially we were looking at this as just a one off, but in light of today's success we are seriously considering taking it nationwide. You can look at it as confirmation of Gremlin's continued support to an incredibly popular platform."

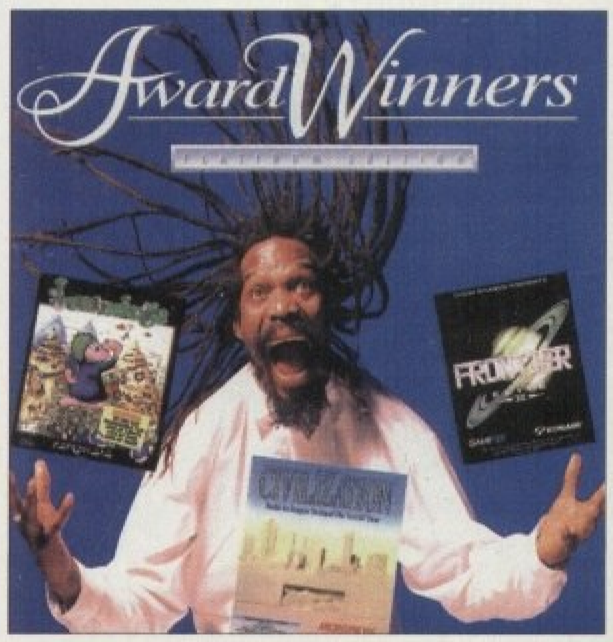


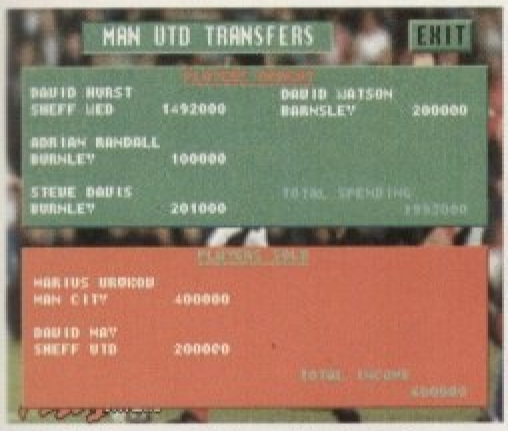


Gremlin's recent promotion of their Shadow Fighter game proved a great success

Bargain hunters

Empire Interactive certainly caters for the more thrifty among you with their budget compilations. Their latest offering is Award Winners Platinum which comprises of Civilization, the strategy game, Frontier: Elite 2, the popular space game and Lemmings, the much loved suicidal critters. This will be available for the bargain price of £34.99.





Tracksuit Manager 2 will provide plenty of facts and figures for management fans

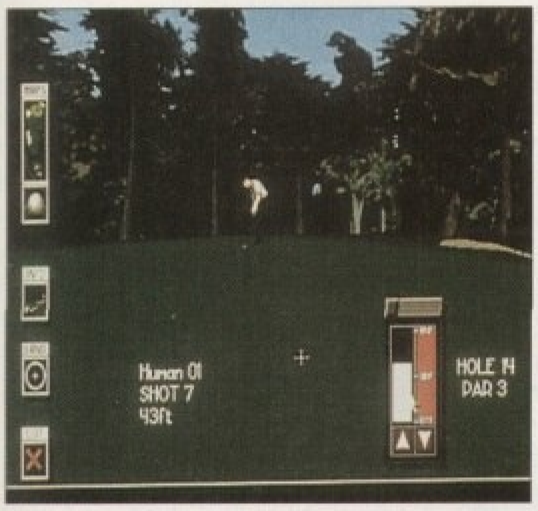


The game looks to be well presented with easy-to-read tables

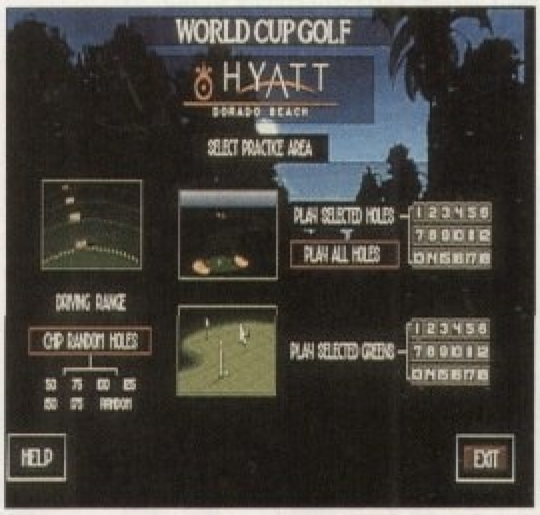
US Gold's hole in one

US Gold are planning a multi-format CD-based launch with their new golf game, World Cup Golf. Five formats including 3DO and CD32 are set to see what US Gold are citing to be "far the most technically advanced simulation of its kind ever to hit the market." Steve Hickman, producer for the project commented: "We wanted to program the most realistic golf game of all time and we have the opportunity to produce a product that is way ahead of anything else on the market."

In conjunction with software house ARC Developments, the game has been created with Silicon Graphics hardware and a 3D modelling package from Wavefront Software, and accurately recreates the settings of Hyatt Dorado Beach in Puerto Rico where the World Cup of 1994 took place. Look forward to World Cup Golf in the very near future.



US Gold's multi-format release, World Cup Golf, will be appearing on the CD32 soon

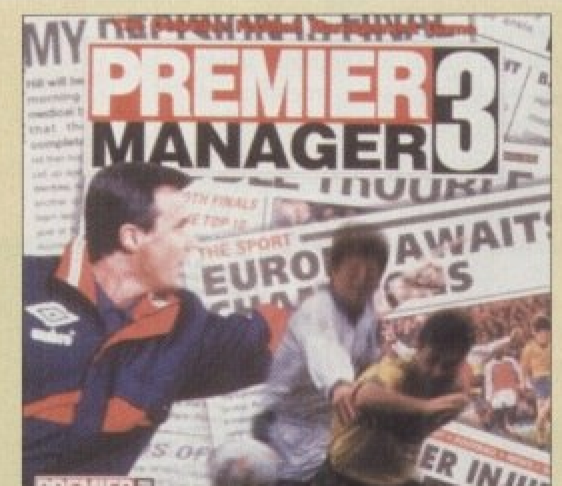


Hyatt Dorado Beach Golf Resort has been accurately recreated and the graphics promise to be superb

Stats amazing!

Despite bragging the most up-to-date data you could possibly want, Premier Manager 3 has inevitably become out-of-date – if only very slightly! But fear not because Gremlin Interactive have come up with a solution – The Multi Edit System. This allows you to customise the game to your own liking and make it as up-to-the-minute as possible.

Premier Manager 3 received rave reviews everywhere and even earned 80 per cent and our Gold Award. And now for an extra £14.99 you can ensure that you have all the current facts and figures and the game personalised to your taste.



You can edit any of the players in any way from morale and name to contract length. Maybe you will want to rebuild the Divisions as teams get promoted or relegated, or add European clubs. You can even alter the names of injuries your players get to more colourful ones! And if you fancy redesigning your teams kit, you can.

It allows you to be creative with the matches too. Design a Super League pitting teams from the past with teams of today – who says you have to stick with the facts?!

Desirable games



Inordinate Desire combines space dogfights with complex strategy



Many rendered screens and atmospheric music should impress

Black Legend's Croatian development team, the folks behind Football Glory, are working on a space strategy war sim. Called Inordinate Desire, it was originally for the PC but Amiga AGA and CD32 versions are expected to follow this year. The game revolves around warfare and takes place in future space.

Strategy fans are going to love it as it contains complex ground strategy over many different terrains. Three dimensional dogfights complete the game which promises "impressive rendered screens" and "months of gameplay." Atmospheric music and full in-flight speech samples will add realism.

Also from Black Legend we can expect Voyages of Discovery. German software house, Software 2000, have developed the game originally for the German market under the name Christoph Kolumbus and it has proved popular. It is now being released in English by Black Legend.

It is a complex trade simulation that takes you back to the time of Christopher Columbus and the days of continent discovering. It is your role to establish trade, build colonies and transport goods. Your ultimate goal is to become the most powerful and most widespread empire in the world.

Up to four players can take part and with the animated sequences and realistic historical graphics it promises to be an absorbing strategy game.

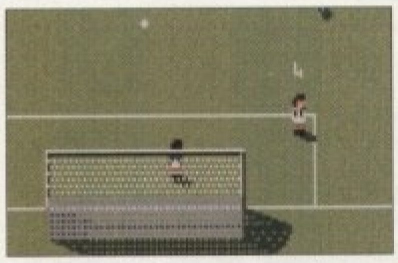


Voyages of Discovery was originally released in Germany as Christoph Kolumbus

System Selections

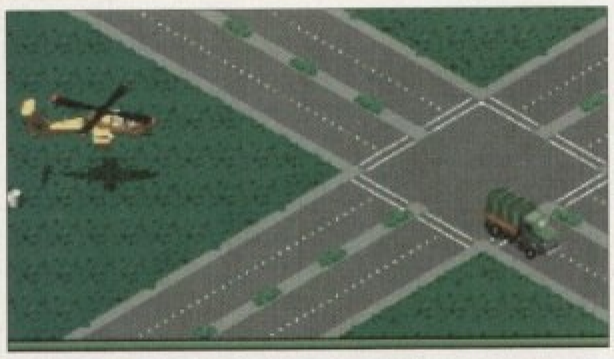
Wondering which new releases deserve a place in your games collection? Wonder no more, as System guides you through the latest and greatest we've seen recently.

Sensible World of Soccer



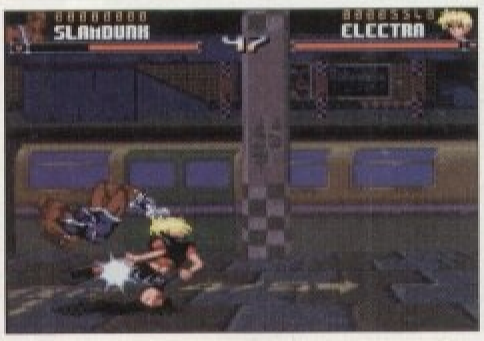
The interaction between the tactics and the transfers is just brilliant and in my mind SWOS is the world's first football game that has managed to get a perfect balance between a pure arcade game and a management simulation. I had my reservations about yet another episode of Sensible Soccer, but I've had those firmly destroyed because SWOS is the best Amiga game that money can buy.

Jungle Strike



Amiga owners have waited a long time for Jungle Strike to be converted, but their patience has been rewarded with a game that will test their arcade and tactical skills to the limits. With its impressive graphics and the superbly designed game system, it could well be the best chopper title to date.

Shadow Fighter



As far as beat-'em-ups go on the Amiga, I've been more than pleasantly surprised by Shadow Fighter. It could go from strength to strength after the release of the AGA version and finally take the beat-'em-up crown away from games like Body Blows and Mortal Kombat. Shadow Fighter is, quite simply, thumping good fun.

The all New World of Lemmings



Anyone who played the original game and liked it will love to get their hands on a copy of Psygnosis' latest offering. It's what you might call a conglomeration of old and new. The old being the original and incredibly addictive gaming concept, the new being the advances in graphics and sound. These two elements combined make for a rip-roaring action-packed 90-level puzzler that just gets better and better the more you play.

Skeleton Krew



This is my first musical highlight of 1995 and it's all thanks to Core Design who have obviously got the intelligence to use someone who is skilled at creating original pieces of high quality music that belong in the '90s and not the '80s. The graphics are very impressive and it's obvious they've been created by someone with a love for science fiction films and comic books. For people who are interested in stabbing that fire button as fast as possible, Skeleton Krew could well be your cup of tea.

The scores on the doors

A guide to how our revolutionary scoring system works...

We're sure many of you are now familiar with our new scoring system, but for those reading *Amiga Computing* for the first time and those who might have forgotten exactly how it works, here is our guide to the System scoring, err system.

In our opinion, review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be.

In the long run you'll receive a more concise and reader-orientated review that's geared towards the consumer.

0-20 This is given to the lowest of the low

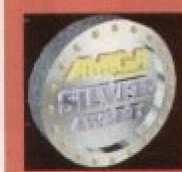
21-30 An all-round poor game that may have a single saving grace

31-40 Just below the average, perhaps let down by a few indiscretions.

41-55 Games of this score are roughly average with 50 being a perfectly average score.

56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.





67-77 A game of high quality that you as a reviewer would have no reservation in recommending. Anything of this ilk would be awarded the SILVER award.

78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This type of game would receive the GOLD award.



90-100 The best in its genre. This benchmark title receives the PLATINUM title.



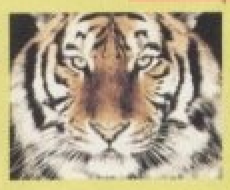
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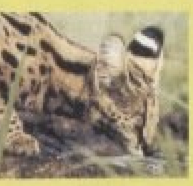
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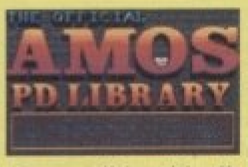
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Amos CD

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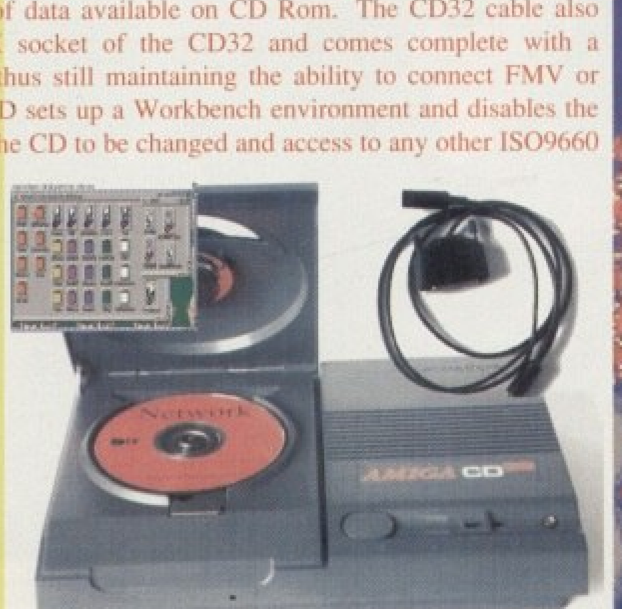
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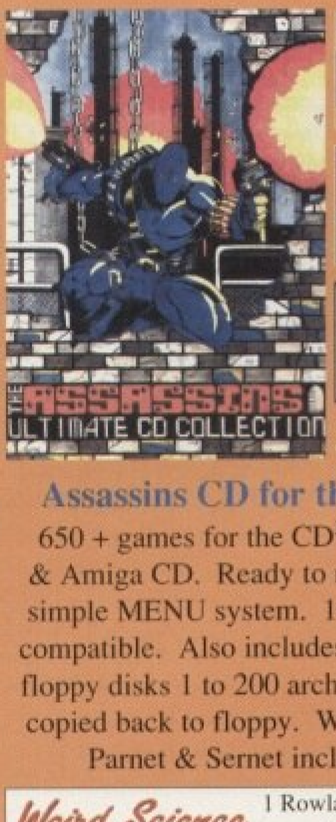
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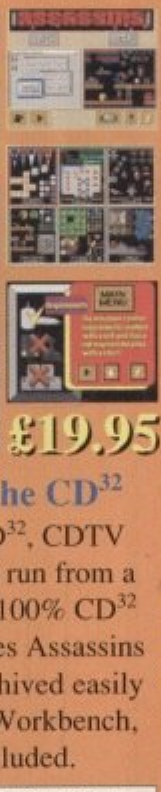
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After you've killed Sartani and you've had a chat with the keeper, you'll find yourself in the car park. Keep an eye out for the wire cutters



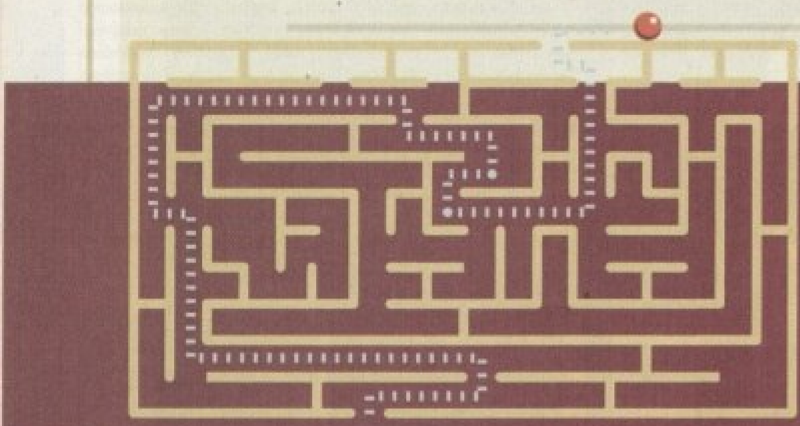
At Chapel's house you'll have to get past the policeman, before you can get your hands on the all-important blue cartridge



Have a look around the church and examine the remains. Take the hand with the ring on and place it within your inventory

Beat the

Dreamweb Part 2



The concluding part of System's two-part guide on how to complete Empire's blood 'n' guts extravaganza. Jonathan Maddock makes his way through the final gory stages just for you.

Three down...three to go. After killing Sartani you'll be transported back to the Dreamweb. Talk to the Keeper and he'll tell you what your next objective is. Make your way out of the web by placing your hands on the correct stone door. Use your key on the plinth and you'll be back in your own dimension.

You'll find yourself in a car park, where you must find the van with tarpaulin in the back of it. Take the wire cutters from the back of the vehicle and then have a look in your inventory. Read the papers that you stole from Sartani's briefcase. This document will tell you the whereabouts of Chapel and Underwood.

First go to Chapel's house. Find and talk to the policeman. Chapel's house has been bombed, but you must find a way in. Make your way back to the other screen and then examine and use the wall. Among the destruction you'll find a picture of a church and more importantly, a blue cartridge. Take this network cartridge and go back to your flat.

Once you've made this journey, use your freshly-acquired cartridge inside your network console. Logon as Beckett and enter 'Septimus' as your password. Read what's on the cartridge and you'll find out where the church is.

Leave your flat and go to the church. Once there you'll find your way blocked by a gate, but if you use the wire cutters on it you'll be able to enter the forecourt. You can try and open the wooden doors, but you'll find that they're locked, so leave the church for now.

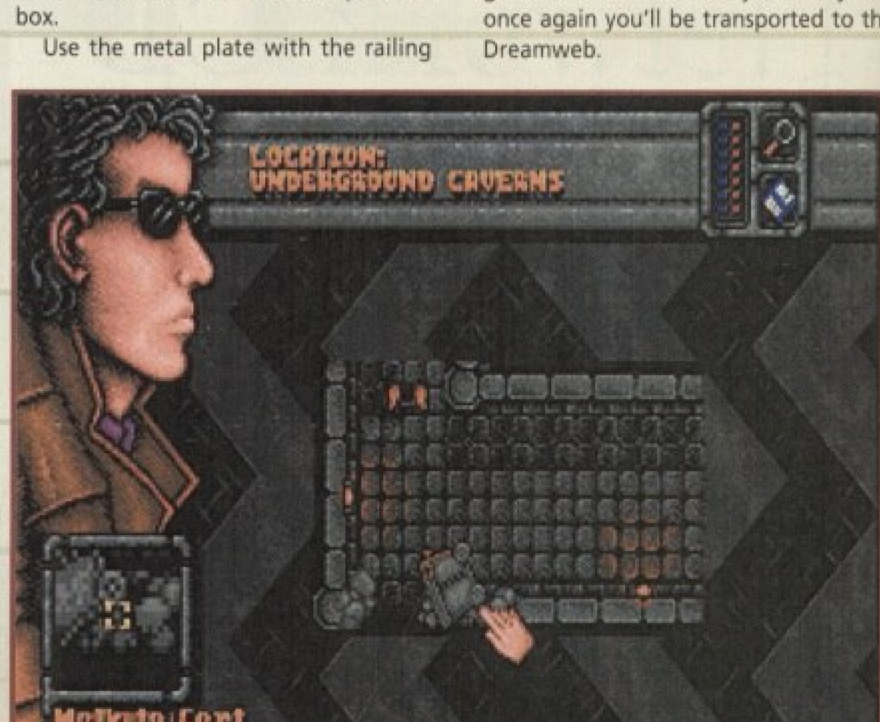
Head back to Eden's flat and pick up an empty mug from the kitchen and leave. Underwood's boathouse is your next port of call. Once you're there, examine the pipe in the water and then use it with the empty mug. At the top of the screen there are some railings. Examine them and you'll be able to pick up a broken shard of railing. Walk right and you'll be able to see the boathouse.

SECURITY

If you use the balcony at this point you'll activate the security system, get a laser blast through the stomach and it'll be game over. Examine the metal plate at the top of the screen. Use the metal plate and Ryan will brush off some of the sand to reveal an electrical junction box.

Use the metal plate with the railing and the junction box will open. Use your mug filled with water on the box and the security system will short-circuit and explode. You can now use the hole to climb up on to the balcony. Find the hole in the window and climb through it to enter the boathouse.

You'll find Underwood crawling along the floor in some considerable pain as half her body is missing. Talk to her and once you've got your information, put her out of her misery by shooting her in the head with your gun. Her soul will enter your body and once again you'll be transported to the Dreamweb.



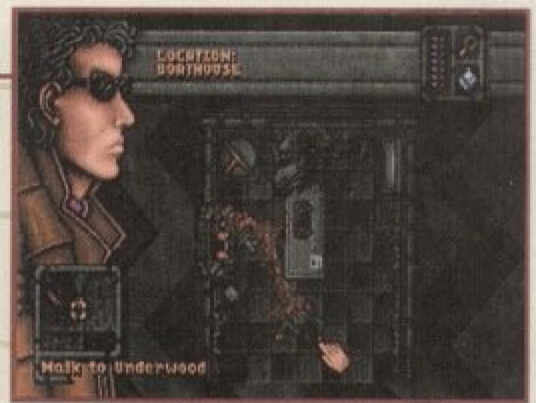
Wander around the corridor complex picking up the stones and then place them in the cart to gain access to the priest



Make your way south to the bottom of the church and have a look at the altar. Remove the objects and give it a shove to further your quest



Open the junction box with the railing and then pour the mug of water over the wiring to get past the security system



Inside the boathouse you'll find Underwood. Shoot her in the head with your gun to end her miserable pain-riddled life

System

The end?

Once inside the Dreamweb talk to the Keeper and he'll tell you what your next objective is. Locate the correct stone door and once again use your key on the plinth to be transported back to Earth. This time, when you awake you'll find yourself further along the beach. This might be an ideal time to have a look at your inventory and see which objects you don't need anymore. Most of the specific items you've used previously (i.e. keycards, passcards) can be thrown away.

Go back to the church and you'll find that the doors are, miraculously, now open. Enter the church, walk past the remains and find the altar. Take both candlesticks and the white cloth off the altar. Try and use the altar and it just won't budge. Examine the hole in the altar and you'll see that a hand will fit inside it.

Walk back to the remains and take the bony hand from the body. Use this hand on the altar and then use the altar itself. With a great deal of effort, Ryan will shove the altar out of the way, revealing a hole in the floor.

Go down the hole and examine the tomb. Use it and the lid will pull back to reveal two red crystals, a dagger and a rock. Take all of these items. There is a jar beside the tomb, have a look inside it and you'll find another red crystal.

There is a stone design behind you on the floor with three holes in it. Place the three red crystals into the appropriate holes and a hidden door will open allowing you to leave the tomb. Have a look around the corridor and you see that your way is blocked by a gate.

Head to the top of the corridor and examine the statue. Use the statue and a puzzle will appear in front of your eyes. You must rotate the symbols to match the one which appears on your Dreamweb key. This design can be found in the Diary of a Madman which comes free with the game, but to save you the time, the top half of the symbol looks like a semi-circle with three spokes jutting out from it, while the bottom half is a plain semi-circle.

Once you've matched the two symbols, correctly push the crystal in the top of the statue. You'll hear the gate open in the distance. Walk through the gate and to the end of the corridor. You'll find a door at the bottom left of the screen which requires a triangular key of some kind.

Go up and you'll find a trolley. Walk around the corridor complex and you'll see loads of rocks scattered around. Pick them up – there should be eight (including the one from the tomb) in all. Once you've found them all, place them in the trolley.

Use the trolley and Ryan will give it an almighty push and it'll fly off the screen towards the door. The screen will shake and you'll hear a crash. Walk down towards the door and you'll find that it's now open. Walk through the door and head through the left-hand passage and up the stone steps.

You'll find the priest, but he's already changed from human form into something else and all you can find are his alien remains. However, your attention must now turn to Beckett the psychopath.

Force yourself through the small hole which lies directly to your right. You'll find yourself in a storeroom, move left and somehow you're now inside a subway. Go upwards and make your way on to the actual train track. Head north until you find a gap in the left-hand wall. Go through it and you'll bump into Beckett.

After talking to the madman he will try to kill you. Run back towards the door and lure Beckett on to the train track. A subway train will run him over and you'll be whisked off to the Dreamweb for the last time. All that's left to do is sit back and watch the end sequence because you've now completed the adventure.



You'll find yourself in the subway system. Don't bother going south as there's nothing there, instead head northwards

The final encounter in Dreamweb involves a stand-off between the psychopath Beckett and yourself



INTRODUCTION

When Diggers arrived on the small screen in late 1993 I took to it like a duck to water, but what about everybody else? Gamers expectations had been raised due to the fact that this was the first product to appear on the CD32.

No amount of good reviews or advertising could've competed with that amount of hype. When Diggers finally arrived people expected some kind of graphics and music spectacular and unfortunately, although Diggers looks good it isn't that good!

Bizarrely, a lot of people made comparisons between Diggers and the legendary game of Lemmings, all of which were terribly unjust. Diggers may have looked like Psygnosis' suicide-a-thon due to the size of the characters, but in terms of gameplay it was a completely different matter altogether. Millennium's dig-'em-up was certainly more cerebral, plus you had the advantage of being able to do whatever you wanted to due to the open structure of the game.

Originality alone should've been the key to Diggers success, and although it was packaged free with the CD32 it didn't do amazingly well in the sales department. This is a real shame because everyone at System liked it, especially the soundtrack – a wonderful chilled-out ambient masterpiece, making it a very relaxing game to play.

Millennium have returned to the CD32 once more. They've got a copy of Extractors clutched in their sweaty mitts and hopefully this time around, more gamers can experience the sequel to one of the most under-rated games ever created.

Publisher: Millennium Interactive
Developer: Toby Simpson
Disks: 1
Price: £29.99
Genre: Strategy/puzzle
Hard Disk Install: n/a
Control System: Joypad
Supports: CD32, A1200 + CD Drive
Recommended: n/a

Extractors

STORYLINE

Extractors is set 150 years on from the original game. At this time, a race of creatures perfectly evolved for the job of digging appeared from some distant planet. The Zargonian Mineral Trading Authority saw this rich opportunity arise and immediately employed them to extract jewels and fuel from the planet.

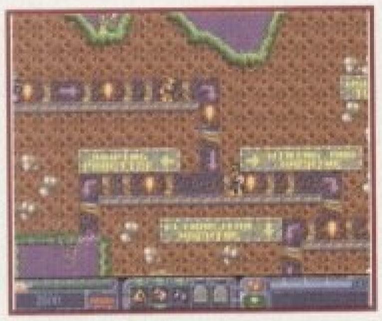
The newly employed aliens worked so well that soon the mines became exhausted and it began to cost the ZMTA more money than they had bargained for. There were, luckily, a few more places where the land was rich in jewels and fuel – the Floating Lands.

These huge masses are inhabited by the Flinarj, a peaceful race who built machines to allow their land to float in the sky to avoid being constantly attacked by the Quarriors. ZMTA tried to take the lands by force, but they're protected by an enormous shield.

The shield is powered by 24 generators, all of which have to be destroyed to enable the ZMTA access to the lands. You must travel from floating world to world, finding and destroying the shield generators while, at the same time, successfully mining enough fuel and cash in order to get to the next land.



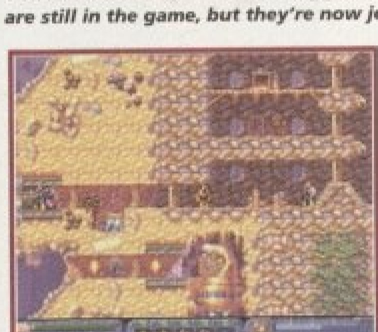
There are six totally different terrain types in Extractors and before you attempt each level you get a wonderful picture of that terrain. Coo!



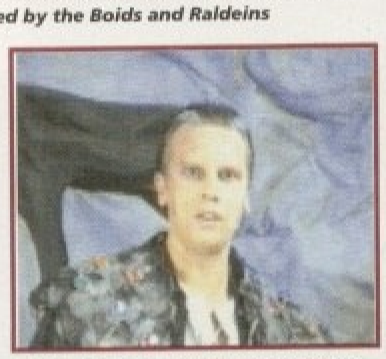
The trainer level allows you and your diggers to practise and develop skills and abilities without fear of dying. Quite handy for the Extractors beginner



You now have three tribes of diggers to choose from. The Jawa-like Habbish are still in the game, but they're now joined by the Boids and Raldeins



The first foray into the world of Extractors and already one of the Habbish has found some fuel modules



A shot from one the messages from the ZMTA. Is it me or does he look like Chris Morris from The Day Today?

SOUND

One of Diggers best features was its blissful ambient soundtrack. It was the best piece of music I'd heard all year and I'd quite happily let the game play on its own just to listen to it.

Musically, Extractors isn't quite as dazzling as its original counterpart. There isn't a specific tune that plays while you do, but there are a number of sound effects that add a certain suspense to the game.

There's a fair amount of speech within the game. For instance, whenever you enter the trading centre a character will tell you exactly what's out of stock. The animated introduction also includes some digitised narration which makes the game seem almost like a fairy-tale.

To sum up the sound, in some aspects it's far better than the original game, but in others it's far worse. The inclusion of more high-quality digitised speech is a definite plus point, but the loss of the chill-out soundtrack is a big thumbs down.

The new minimalist themes within the game are OK, but they're nowhere near as good as the original soundtrack and due to this little factor Extractors has lost some of its atmosphere.

A System remedy is at hand though. Switch on your CD player, slap on The Orb's Adventures Beyond The Ultraworld or Future Sound of London's Lifeforms and hey presto, instant ambient atmosphere.

37%

GRAPHICS

Extractors, as it did last time around, uses 256 colours throughout the whole game. Even static title screens are very impressive – even more so than the ones found in the original Diggers adventure. Just have a glance at the page to admire just how good they are!

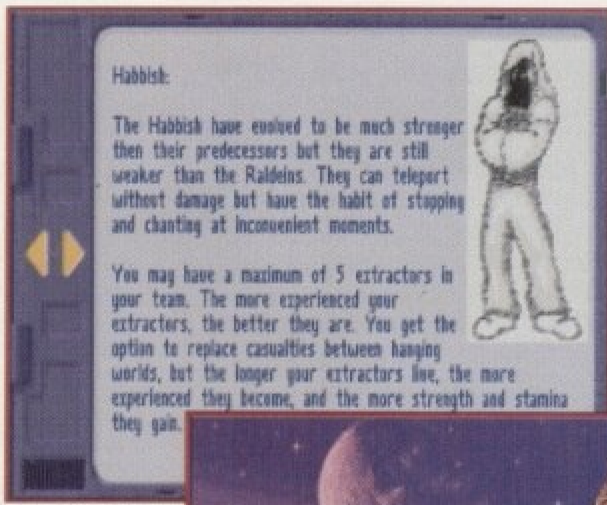
Other graphical features include six totally different terrain types, each with its own set of animations, colour cycling effects and parallaxed backgrounds. These varied levels are all easy on the eye and they're so distinctive that it feels as though you're playing an entirely new game everytime you progress onto the next level.

Millennium were the first company to use digitised sequences of film within their games. You must remember the animation used in the CD version of Robocod. Extractors has its own animated sequences that pop up between and during levels.

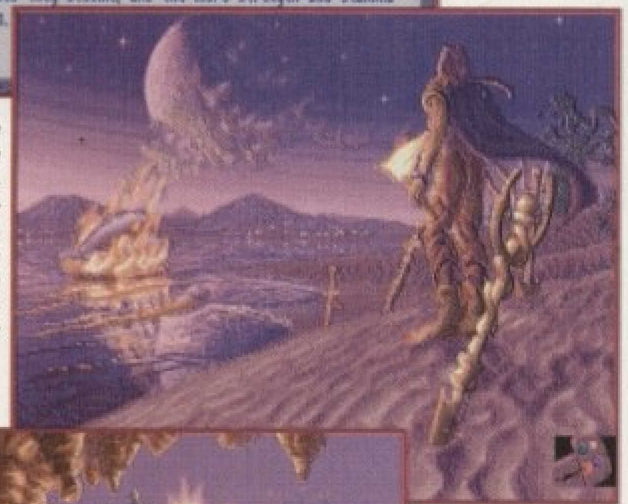
These rendered sequences were all created using 3D-Studio and look very nice indeed. CD32 owners who own the Full Motion Video cartridge will get the best out of these animations, but having said that, they do look quite good without the need for the add-on.

The game certainly looks a lot sharper and more colourful than its original counterpart. Overall I can do nothing but compliment the graphic artists for the superb work they've done on Extractors.

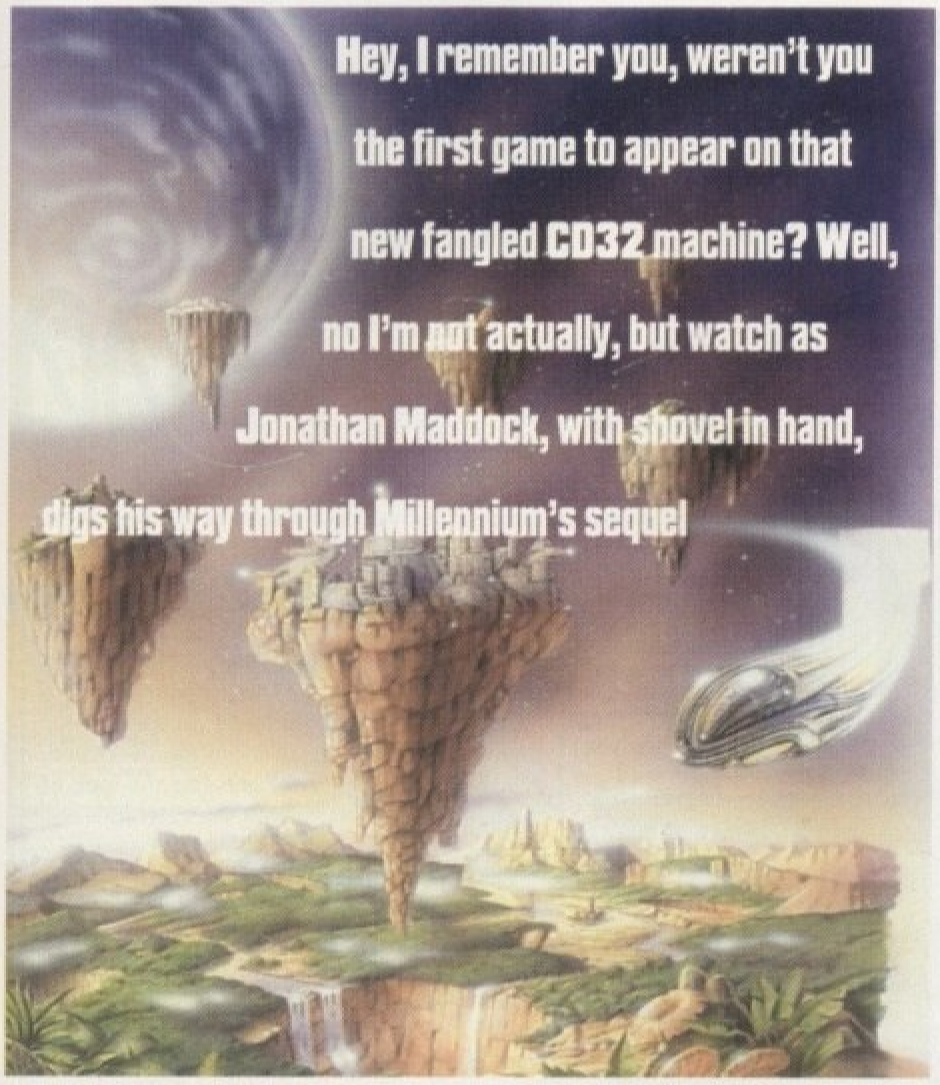
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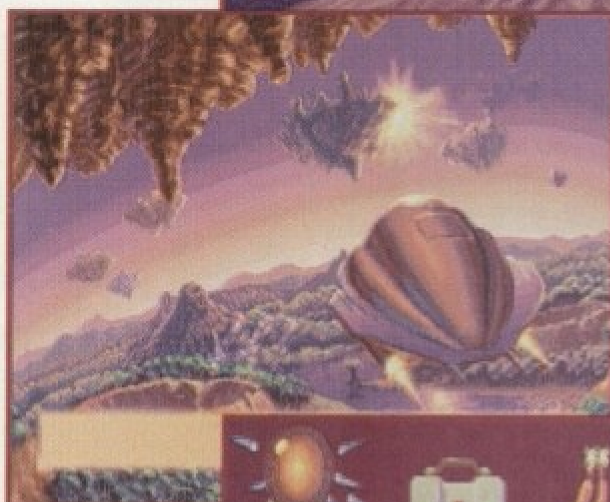
If you come up against any problems or you've got a query that needs answering, all you have to do is have a quick glance through the useful interactive book



Due to a total miscalculation I seem to have lost all my diggers plus the level, and here's a gorgeous static shot to prove it



Hey, I remember you, weren't you the first game to appear on that new fangled CD32 machine? Well, no I'm not actually, but watch as Jonathan Maddock, with shovel in hand, digs his way through Millennium's sequel



After destroying one of the 24 shield generators, collecting the fuel and fending off all the various beasts, I can now make my way to the next level



Here's a quick handy shot of just some of the various bits of equipment you can buy from the Trading Centre to help improve your diggers

OPINION

89%

I loved Diggers, but due to the type of game it was (is?) you had to use that part of your body called your brain. I know it wasn't a mindlessly violent shoot-'em-up or a sickeningly cute platformer, and I know it takes anything from 20 minutes to an hour to complete a level, but this was no reason to banish Diggers from our gaming world, never to be seen or heard of again.

Diggers had its faults though. The levels were a bit too open-ended and left you wandering about, sometimes cluelessly, for ages. Extractors is different – you've now got several specific tasks to achieve and thanks to this, the game as a whole becomes far more focused and enjoyable to play. New features-such as the training level, new characters and the healthy return of an interactive book all go towards making Extractors a highly polished product.

There are literally thousands of hours of play contained within the game, so it's not going to be something you'll tire of easily. It is fairly hard to get into at first and not everything seems straightforward, but play it for a week (not constantly, you're not that sad!) and you'll grow to like it.

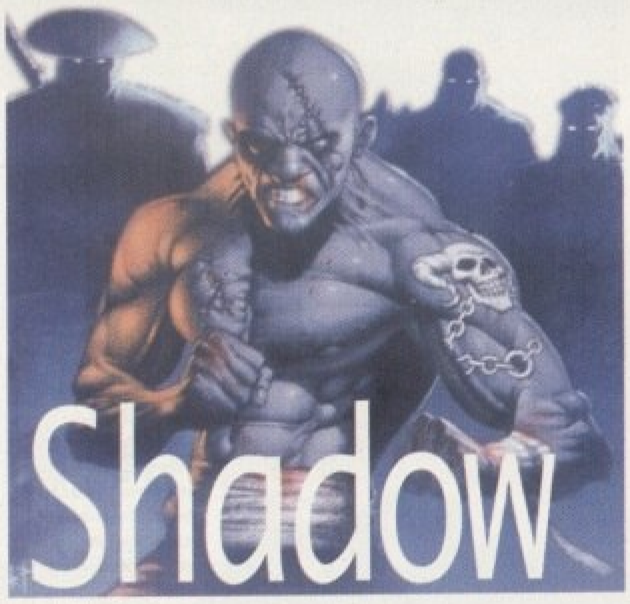
Extractors will appear on the CD32 only, as it's impractical to try and make it work on the lower-end machines. Luckily, A1200 and A4000 owners with a compatible CD-ROM drive will also be able to experience the wonderful worlds just like their CD32-owning chums.

When Diggers arrived on the games scene it literally blew me away due to the time of the release and the newness of the CD32, and although technically Extractors is a far better game, it still won't be a piece of software that'll appeal to everyone.

Extractors is graced with some of the best graphics I've ever seen for this type of game and it's packed to the brim with more addictive gameplay than you can possibly cope with.

Fans of Diggers will no doubt be interested in Extractors, but I hope that Millennium gain a few more fans through this release and people don't ignore it this time around.

AMIGA GOLD AWARD



Shadow Fighter A1200

Tina "couldn't knock the skin off a Rice Pudding" Hackett looks at Gremlin's beat-'em-up.

The best has just got even better! It sounds a bit of a sweeping statement to make but believe me it's true. Gremlin Interactive's excellent beat-'em-up arrived in the office a couple of months back and we were gobsmacked by it then. Then this morning we got a mysterious brown envelope. No it wasn't Gareth's usual supply of 'Foreign Art' magazines either, it was in fact Shadow Fighter, enhanced for the A1200 and A4000.

Now the original received 90 per cent and a Platinum Award, which believe me, we don't hand around lightly; so it had to be something really special to get this. Not only that, but in the same issue it beat off its challenger, Mortal Kombat 2, by a thumping 10 per cent. Why? you may ask. Then read on.

INTRODUCTION

The story behind Shadow Fighter isn't all that original but it gives an aim to the game. To cut a long story short, the Shadow Fighter was a 17th century Samurai who got a little on the greedy side. After killing off some of his own kind, his punishment for his bad deeds was eternity as one of the walking dead. Needless to say, he starts to regret this a bit and announces a challenge to any fighter to see if they can beat his formidable fighting skills.

SOUND

There isn't a great deal of difference between this version and the original as regards sound. This is because there doesn't need to be. Shadow Fighter has an extremely strong soundtrack with plenty of variety. It doesn't just stop at one tune throughout either – the fights are accompanied with a variety of music. Loud, pounding tunes and a fast dance track fit in well with the pace.

The sound effects are the usual yelps and thumps but they work well enough – and there is quite a nice electrocution effect!

76%



Shadow Fighter excels with the many slick-looking moves available

- Publisher: Gremlin Interactive
- Developer: NAPS Team
- Disks: 4
- Price: £25.99
- Genre: Beat-'em-up
- Hard disk install: Yes
- Control system: Joystick
- Supports: A1200/A4000
- Recommended: 68020



All the 17 characters look amazing and are very original



The joystick controls work well and moves are easy to execute

GRAPHICS

Although Shadow Fighter may not have looked as hot as its rivals, it really surpassed them in the playability department. And now even this slight grumble has been more than rectified. 256 colour graphics really enhance the look of the game and detail, in both the backdrops and the characters, add enormously to the visuals.

I must admit, I liked the graphical style of the original anyway. It wasn't as gory as Mortal Kombat 2 (although it did have the option to turn blood effects on and off) but the Special Moves made up for this. High, lightning kicks, electrocutions and slick throws and punches looked spectacular, and it's just an extra bonus that this can be seen in full AGA glory.

86%

OPINION

91%

Never trust the quiet ones, that's what my Mother told me anyway. And in this case it's true. The big, brash Mortal Kombats, Rise of the Robots and Shaq-Fus were backed by huge advertising campaigns, shouting the odds. But it was the quiet one in the corner that came along and had these other featherweights begging for mercy.

Shadow Fighter really was the surprise contender that stole the show. And now if you're lucky enough to have an A1200 or A4000, an enhanced version can be yours.

The joystick controls work like a dream and special moves are easy to carry out after a little practice. This provides longevity and unlike some other beat-'em-ups, they don't require a ridiculous amount of manoeuvres to work.

Another nice addition is Pupazz – the training puppet. This allows you to try all your moves before you get battered in the real thing! The many different fighters will keep you battling for a long time yet and with a data disk containing eight new fighters in the offing, you're promised hours of entertainment.

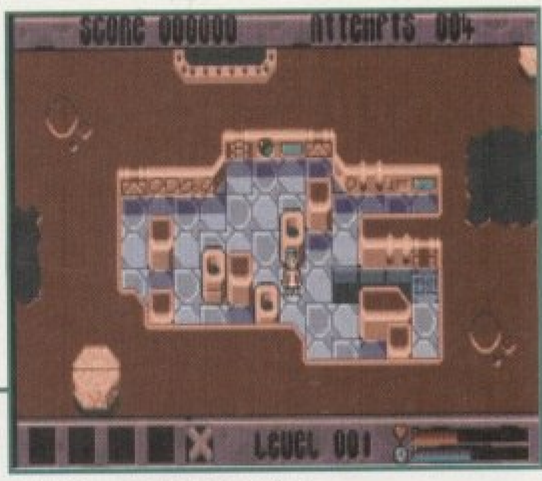
PLATINUM AWARD

Shadow Fighter excels in all departments. The added bonuses in this version, such as being hard disk installable and having enhanced graphics, make this a highly recommended title. It's a credit to NAPS and Gremlin that they have found a way to cater for both the A500 and the A1200, and whatever your machine I strongly advise you to go out right now and buy it.

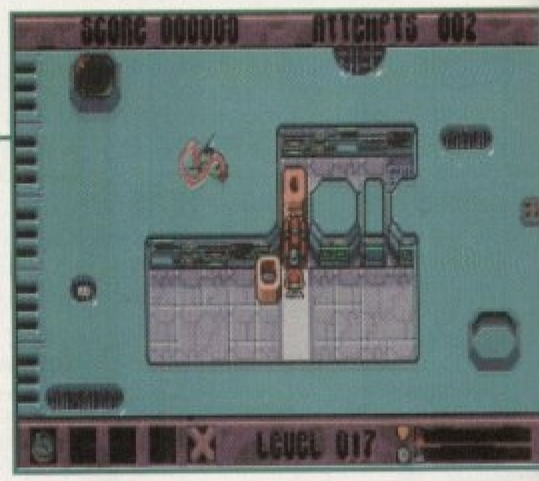
INTRODUCTION

Admittedly, I'm not the world's greatest puzzle fan. In fact, when Rubik's Cubes were in I lost it completely and ended up peeling off all the coloured squares in order to solve the darn thing. So I felt a little daunted when this latest puzzle offering arrived courtesy of Psygnosis.

Despite disturbing memories of pointless, trivial puzzles that involve pushing bits of coloured tiles around in order to move another colour next to the same colour, I decided to give the game a chance. And pleasantly surprised I was too... this one had a point to it!



X-IT at its most basic. The puzzle elements are introduced gradually



The bombs come in handy for destroying obstacles that get in the way

STORYLINE

Hold on, bear with me. It's a bit of a strange one this. Bill is your regular kind of guy. That is until he walks back from the fish and chip shop and comes face to face with an alien who whisks him back to a spaceship.

The aliens want to carry out an experiment on Bill so they can find out vital information about intelligence (or lack of it) on Earth. If it turns out he is rather on the dim side, they'll invade Earth – if not the planet of Ursa Minor Gamma, whose inhabitants are none too clever, will be attacked instead.

So they put him in a maze to see if he can escape their traps in the allotted time – if he doesn't then Earth will be doomed.

PLAYABILITY

X-IT is without a doubt a pure puzzler. The object is to escape each of the mazes by using the blocks. Each type has different properties that will either help or hinder you and you'll have to figure out how to use them to your advantage.

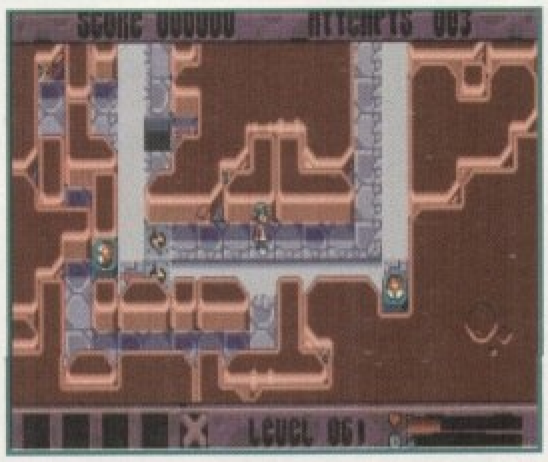
Each level has a time limit and a different temperature which may affect the blocks. For example, an ice block in a hot level must be used quickly before it melts. Some stages have bombs which explode in a certain time, and you have to move the bomb to where you want it to explode to gain the most beneficial effect.

The blocks all have different weights too, so with a Lightweight one you won't have a problem pushing two around at the same time, but a medium one can only be pushed on its own. Heavy blocks can only be moved with wheels.

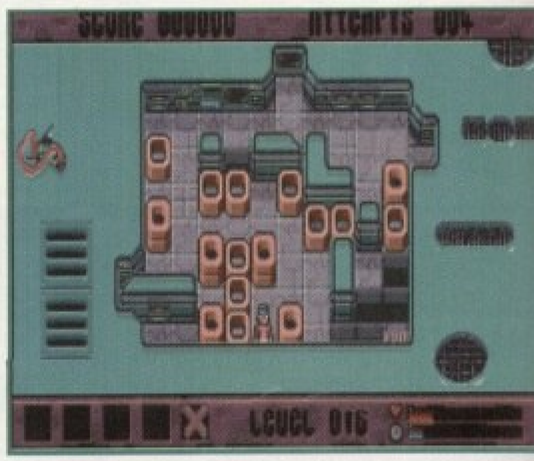
Other blocks include Magnets which repel steel blocks in the opposite direction, and teleport blocks which allow you to transport blocks to other areas. This is all straightforward enough – until you come across the obstacles. Glue, for instance, will stop some blocks passing, Radiation blocks are dangerous and should be avoided, and Ice makes blocks difficult to control.

Finally the bonus game is a great diversion where you get to fly your shuttle pod up to the spacecraft to reach the next level, collecting as many extra points you can.

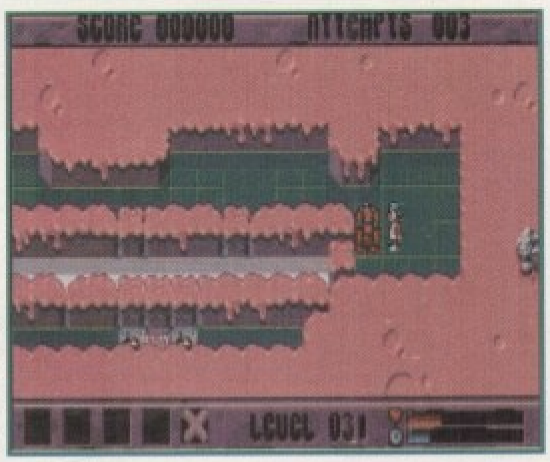
48%



Some of the levels have a really tough time limit so don't hang around



Two light blocks can be pushed around at once, medium blocks only one at time and heavy ones need wheels



Make sure you scan the level to find the exit – time is of the essence



Keep an eye on your health and time meters. Find a heart to replenish lost energy

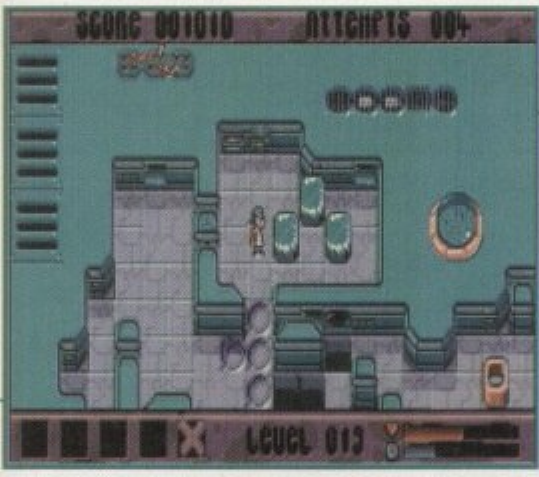
GRAPHICS

X-IT isn't the most graphically advanced of titles but considering the nature of the game, it doesn't need to be – I mean how much can you actually do to make a visually amazing block game?

The overhead view is effective in showing all the action and the graphics clearly show what's going on. The sprite, although quite dinky, shows some nice animation and avoids being cutesy, and the backgrounds for the aliens' lab change so you get some nice variety even though they won't knock your eyes out.

The blocks you have to manoeuvre are easy to tell apart which is pretty essential when you are racing against the clock. Some of the colours are a little on the garish side but it does brighten things up and at least the main screen is uncluttered, leaving you free to concentrate on gameplay.

49%



Ice blocks in warm levels have to be used quickly before they melt



The graphics are basic but serve their purpose



Watch out for electric tiles – they could give a nasty shock

X-IT

- Publisher: Psygnosis
- Developer: Data Design Systems
- Disks: 2
- Price: £29.99
- Genre: Puzzler
- Hard disk install: No
- Control: Joystick/Keyboard
- Supports: 500+/600/1200
- Recommended: 68000 upwards

Tina Hackett dons her thinking cap as she takes a look at Psygnosis' new puzzler. "Just send me to a home for the bewildered" she cried as they strapped her into a straight jacket.



SOUND

The music that runs throughout the game is a lively dance tune. It's not particularly original and you won't find yourself humming along to it but it does do its job and doesn't grate too much.

Sound effects are rather sparse though and it would have benefited the game if some witty samples or at least something (anything) more could have been added. What there is is okay, such as the explosions and the occasional moving block noise, but I feel a lot more could have been done. It's the sort of game where good effects would have really made an exceptional title.

40%

FLASHBACK

X-IT takes some of the oldest, simplest puzzle concepts and turns them into a modern and interesting adaptation. The basic block shifting idea is similar to Tetris or the tile shifting number games (often found in dentist's waiting rooms!). But this takes the idea to a new level as it has a lot more to it than these rather repetitive games. The inclusion of a mission also gives more of a point to the proceedings. I'm not knocking Tetris and the like by any means, but it's good to see something that goes a lot further.

OPINION

70%

Okay, I wasn't all that fond of puzzlers. A lot of them are just too repetitive, but for some strange reason I enjoyed X-IT. It's just one of those games that has elusive qualities to make you want to return for yet another go. Yes, it sure as hell is frustrating, but it really is addictive.

The bonus level, as mentioned before, is a nice addition because it gives you a break from all the puzzling – it gives your brain a welcome rest! A password system is also a very good (and necessary) addition. This one is particularly helpful as it is easy to operate and the passwords are given out after every level completed, not just after every lengthy stage. And if you get stuck on a particular part you can skip it and go back later – there are no irritating dead ends which leave you stranded while your brain frantically ticks away.

X-IT may not be the most astonishing game in the universe but what it lacks in graphics and hi-tech effects, it more than makes up for in sheer playability. The many levels will keep even the most expert of puzzlers occupied for a good while.



The puzzles start off easily, gradually introducing the different elements of the game, but at the hardest level things get really tough! It's not a game that can be rushed through in five minutes flat but at the same time, it has a very satisfying progress level.

Puzzle fans will love this, and even if you aren't – well, I'd still recommend you take a look because this really is an entertaining title. In fact, I'm off for another go right now!

INTRODUCTION

Film licenses always raise a fair amount of cynicism – there have been so many disappointments in the past that it's hardly surprising. However, when news of this latest release reached the office our hopes were raised – this one at least sounded as if it would be something different.

Those in the know will have realised from the title that this is based on the Japanese cult animation, Akira. It is a futuristic story set in Neo-Tokyo after World War 3.

But is it going to be a new kind of film license or follow in the footsteps of its unfortunate predecessors?

Akira

This month we have a game of a Japanese flavour. Is it sushi or just a piece of rotting haddock? Tina Hackett sniffs it out



The motorbike section raises some excitement but it can become very frustrating



The platformer levels aren't all that original and contain all the usual play elements



The concept of the game was excellent in providing a variety of different game types but they all fail to come across



The actual in-game graphics are very poor and although they embrace some aspects of the film they aren't in-keeping with the Akira style

SOUND

The intro is a rather dramatic tune and sets up the game well. Yet again, however, it's into the game and you really start to feel something is amiss. It's not that the music is bad but it really doesn't fit in with the gameplay – it's far too relaxing and does nothing to raise adrenaline.

You can play with either sound effects or music though, which I have to say is a blessing. The sound effects are quite acceptable though. The motorbike on the first level is reasonable and there are some good collision sounds. The rest of the effects are quite impressive with a variety of explosions, gun blasts and the like.

50%

GRAPHICS



To say I was disappointed would be an understatement. Because of the reputation of the film for its top quality animation, I was expecting something quite special. This falls far short of even half-way decent.

The game starts with a very impressive (if rather short) animation which works well, and then we're into the game. You immediately realise there is something very wrong because the main sprite is tiny and really could be absolutely anyone – even though you can play Kenada and Tetsuo, two central characters from the film.

Some of the nightmare scenes with the toys and rabbit creatures have been included, but the original horror has gone completely and it now seems quite laughable. The graphics have lost their distinctive Akira style and look very basic and dated. Some of the backdrops would look at home in any typical cliché platformer and the atmosphere from the film is lost.

To its credit though, before each section there is an excellent animation taken from the actual film. These build up the storyline as you go along and are a nice touch. It's just such a shame the in-game graphics don't match this as there was great potential in the license

45%

- Publisher: International Computer Entertainment
- Developer: In-House
- Disks: 1 CD/3 disks
- Price: CD: £29.99; Disks: £24.99
- Genre: Platformer
- Hard disk install: No
- Control system: Joystick/Joypad
- Supports: All Amigas (1Mb)
- Recommended: 68000 upwards/CD32

OPINION 36%

The game has had quite a big build up and because it bore the name Akira, I really was expecting a good title. All hopes were well and truly dashed I'm afraid. The graphics are poor and the gameplay doesn't work as well as it should.

Different aspects of the film have been incorporated to provide a varied playing style: The motorbikes give an obstacle course objective, the sewers test your piloting skills as you fly around shooting the enemies and avoiding the traps, and other parts were used for more of the usual platformer levels. This was a great concept but it just didn't come across.

The levels are designed to provide maximum frustration rather than just longevity, and it wasn't long before I was tearing my hair out. To those who persevere I'm sure some enjoyment could eventually be gleaned, but quite frankly I wasn't that way inclined. The in-game music made me feel drowsy, the poor graphics became tedious and I felt rather cheated by it all.

I wanted to like the game. It sounded new and original but unfortunately it wasn't. If you're a true Akira fan you'll enjoy the clips of film animation and the way the game incorporates the plot and the characters – but even then, you're still left with some very dated gameplay. This could have been a great license which should have been exploited to the full. A shame.

King Pin

INTRODUCTION

The noble sport of tenpin bowling is a game of great skill and determination. You want proof? Only the other day I was searching through the various satellite channels trying to find something of slight interest to watch. Making my way into the foreign section I noticed that the tenpin world bowling championship was on.

Stopping in my remote control tracks while an over excitable commentator squealed something intelligible into his microphone, I was amazed at just how many people were at the arena supporting this so-called sport.

The two final contenders displayed a total lack of style and dress sense and sported the worst two moustaches I have ever seen in my life, but my god could they play tenpin! Despite the fact they looked like late '70's porn stars, strikes rapidly became commonplace and it was a rare occurrence if they didn't knock all the pins down with two balls.

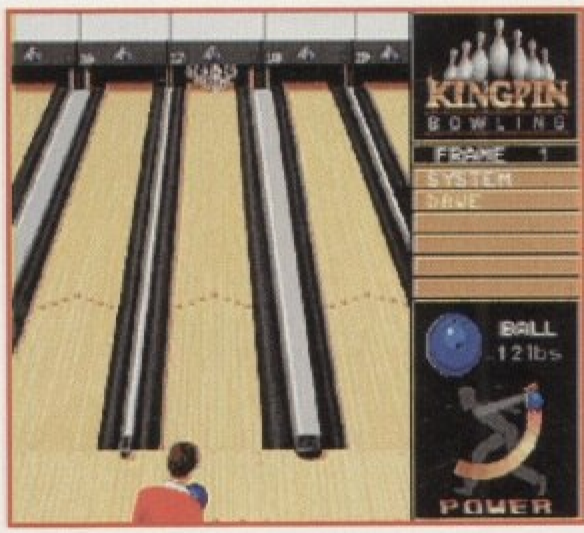
By this time I was getting more and more into this tenpin bowling/moustache lark, and when this TV extravaganza finished I yearned for a trek down to my local bowling arena – but there was something stopping me.

WAYWARD

I have been ten-pin bowling once and it was one of the most embarrassing moments of my whole life. While pulling back my arm to let the ball go hurtling down the alley for a certain strike, I managed to actually throw the ball backwards.

Least to say, the people standing behind me were not impressed and I didn't exactly embrace tenpin with loving arms ever again. The other reason why I'll never play the infernal sport again is those crap blue and red shoes you have to wear. Not only has some sweaty footed goon worn them before you, but any kind of credibility you might've had flies out of the window with the greatest of ease. If I had wanted to look like a clown I would've joined the circus!

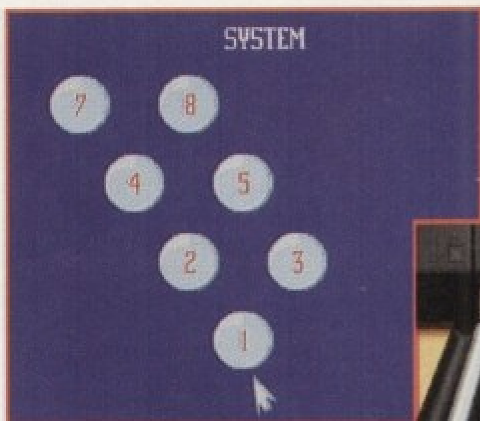
Team 17 have now decided to release Kingpin, heralded as the definitive tenpin bowling simulation, and this means I can play the sport once more without fear of embarrassment and without the need to wear the crap shoes. Hurrah!



The first frame and the pins are all set up just begging to be smashed into oblivion with 16lbs of solid rubber



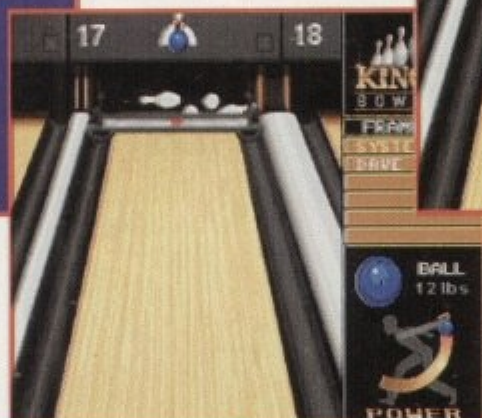
Time to let my computer friend have his go. How do I know this? Well, there's a little CPU in the top left-hand corner of the screen, that's how!



After chucking your first ball down the alleyway, a screen pops up showing which pins need to be struck to secure a spare



The green 14lb ball hurtles towards the petrified pins. In true Question of Sport tradition I have to ask – what happens next?



Just like the real thing, the pins are collected up and re-set, ready for the next player to have his or her go

SOUND

Anyone expecting a top-notch quality movie soundtrack, a raging dance tune or just about any good tune you can think of to appear in Kingpin may as well give up now and go home.

A game like this demands a certain type of musical backing. A cheesy tune is required and Kingpin's musical introduction is just about pure Gorgonzola. It's not my cup of tea, but if you're sad enough to like computer game music then you'd probably like it.

Ignore the soundtrack and move on to the game because what Kingpin lacks in musical taste is more than made up for in the sound effects department. Sit back and turn up your TV/monitor so you can let your ears take in all the sounds.

Hark, you can hear other tenpin games going on in the background and even announcements from the receptionist can be heard. Best of all is when you eventually get to throw your ball down the alley. Listen as your ball hits the polished wooden floor, rolls towards the pins and smashes them all over the place.

The sound effects are all absolutely brilliant and I can't praise them enough as they give Kingpin oodles of atmosphere.

85%

GRAPHICS

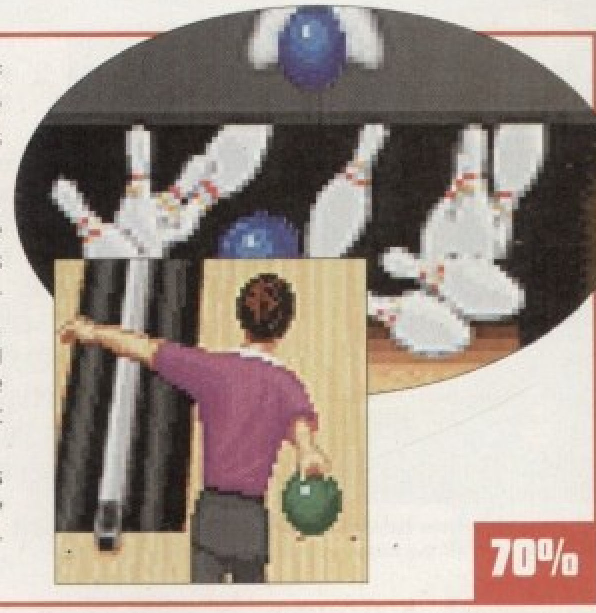
Take a quick peek at the screenshots dotted around the page. On the surface everything looks quite bland, but that is precisely the beauty and point of the graphics. Bland might not be the right word because the actual backgrounds and sprites are well drawn and fit into this type of game perfectly.

What I mean is Kingpin doesn't have fancy rendered graphics displayed in 256 colours to distract you from the all-important gameplay. What you see before you could be described as looking slightly plain, but it lets you get on with the job of knocking down pins which is what the game is all about.

It's fairly hard to tell you about the graphical side of things when there isn't much to explain. Touches such as the ability to change the colour of your bowling shirt aren't that interesting, but they all add up to show that a fair amount of effort has been spent on the product.

Although it shouldn't be in this particular box, there is a rather fine replay option which can be accessed right after you have struck some pins down, by holding down the fire-button for a couple of seconds. Lovingly re-created in slow motion, this feature gives you ideal opportunity to brag about your strikes and spares in great detail. The graphical element added to this feature is a terrific white 'R' which flashes in the corner of the screen.

See, I'm boring you now. Basically, the players are well-animated, the pins look good, especially close-up, and the screen is uncluttered and well-presented.

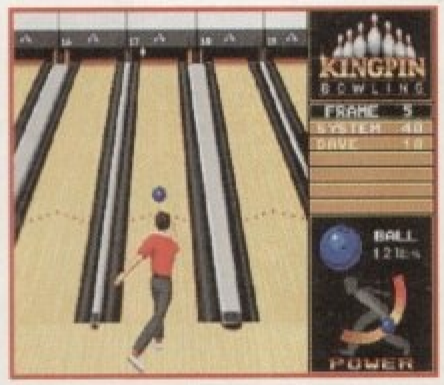


70%

Strike a light, I'm going spare. Team 17 have pinned me down with another budget offering that's bound to bowl me over. Jonathan Maddock continues with the sad gags and takes a look



It's one of those fantastic action replays! How can you tell it's an action replay? By that massive flashing 'R' in the top left-hand corner of the screen, that's how!



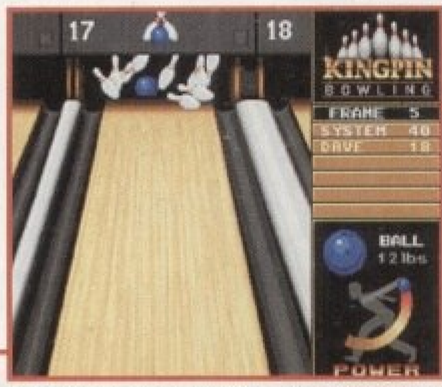
The action reaches fever pitch. Having knocked down nine pins, a spare will be secured by knocking down that last, but oh so tricky pin

ADDITIONAL INFO

Tenpin bowling is an indoor sport which first became popular in North America. As in skittles, the object is to bowl a ball down an alley at pins (ten as opposed to nine in skittles). The game is usually played between two players or teams.

A game of tenpins is made up of ten 'frames'. The frame is the bowler's turn to play and in each frame he or she may bowl twice. One point is scored for each pin knocked down, with bonus points for knocking all ten pins down in either one ball or two (strike or a spare). The player or team making the greater score wins the game.

The game of ninepins was introduced to America by Dutch immigrants in the 17th century. By the end of the 19th century, it was very popular as a gambling game on the streets of New York. Consequently, the game was outlawed and in fact the extra pin was added just to get round the law.



Yes, this screen looks vastly different from the others on this page. The introduction of a blue ball brings the crowd to its feet in excitement



The scorecard helps you keep track of the scores, plus at the end of the game it tells you who has won and who has lost. Coo!

- Publisher: Team 17
- Developer: Team 17
- Disks: 1
- Price: £1299
- Genre: Sport sim
- Hard disk install: No
- Control system: Joystick
- Supports: A500/600, A1200/4000
- Recommended: 68000

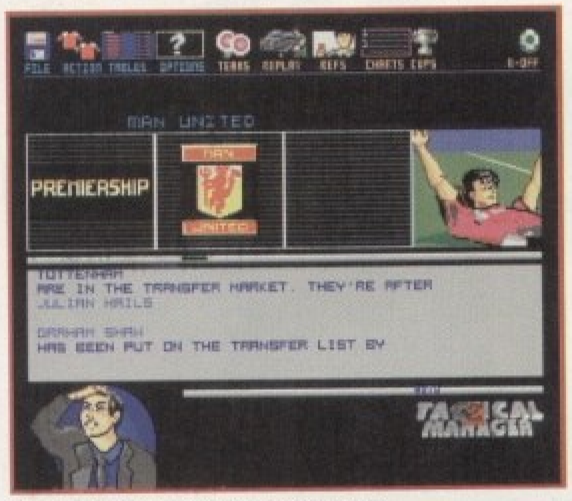
OPINION 88%

AMIGA GOLD AWARD

I'm happy to report that Team 17 have struck again. For just under £13 I challenge you to find a game that performs as well as Kingpin. It may not boast graphics that blow the mind away or tunes that make your ears bleed, but it sports a superb array of sound effects and most important of all, it is packed full of top-notch quality gameplay and addiction.

I've been talking about the bog-standard game of Kingpin, but there are plenty of options such as the spares game where you have to hit a single pin – this sharpens up your bowling accuracy. Multi-player games work just as well as the single game and you can play against other humans or the computer. These features all go to give the game that bit of extra life to stop you from getting bored.

Even if you don't like tenpin bowling you're going to get a lot of satisfaction out of Team 17's latest offering. It's not one of those games you'll play for hours and hours on end, but if you ever need to play something for a short period of time then I'm sure you'll be reaching for Kingpin. Yet another superb success for the Teamsters and is there anyone out there who is prepared to give them a good run for their money?



The continuous news flashes keep you up to date with all the latest goings on

system preview



Tactical Manager 2

Tina Hackett cheers from the terraces as she takes a sneak preview of the latest in a long line of football management games, this time from Talking Birds.

"Football crazy, football mad, we've so many footy management games. It's the most we've ever had." See, it rhymes. And it's also true. There are so many different football games on the Amiga now you may be wondering if we need yet another – especially another management one. Well, we do!

Football is forever changing ya know, and to be on the leading edge you have to constantly update yer products, incorporating all the new teams, all the new features and anything else you can cram in. Let us reminisce...Championship Manager, Premier Manger, Tracksuit Manager, On the Ball, Tactical Manager. Millions of them, and they breed. Data disk follows data disk, update after update. And necessary they are too, because at the rate football moves on, you have to have all the latest facts and figures.

And very soon there will be another one clamouring for your cash. Talking Birds, the development team behind Tactical Manger, have taken heed of what you, the players, think and have added a multitude of innovative ideas to their sequel.

Firstly, Tactical Manager 2 looks slightly different from the norm. Take Manga and mix it with Manager and this is what you get! The characters used add a really nice and original touch with a Manga-esque style and cartoony effects. The main action screen is well set out too and will make accessing options easy. From here you will have all sorts of features to take your team to the top.

Simple drop-down menus allow you to take charge easily and icon selection is only a click of the mouse button away. It sounds pretty trivial but it's going to make the game far more accessible – who needs to plough half way through a game to found out all the vital facts.

You'll also notice that the difficulty level has been increased. Being manager now means having to make sure your team's morale doesn't flag. If you leave players out of the team too long or don't renew contracts you may find players not reaching their potential. A random element has been included however, so players dropped to the reserves may see their fitness improve – it will pay to keep a close eye on all the squad.

The computer teams are more intelligent too and will make use of this feature. They will select better formations and have shrewder tactics, such as time wasting, and their choice of substitutions will be more exact.

Those who played the original will remember the inter-manager cheat. Don't expect life to be so easy this time! This allowed a human player to sell a player under value to an accomplice, to boost his bank balance. Now if you sell a player too high you are likely to get a capital gains tax bill but if you sell too low, joining this club later lands you with an extra legal bill – so now this little trick becomes completely pointless.

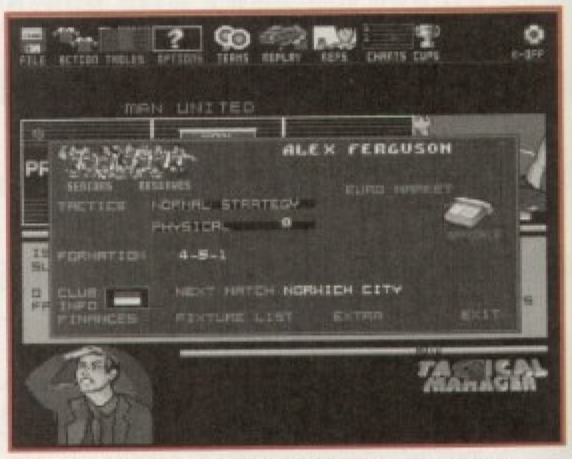
The shirt selection system makes selecting the line-up easier. By clicking on the shirts you can move them to exactly the position you want them in (within logical limits). Many other details, like the facility to enter your own pool forecast or check on last week's coupon, will please stats fans.

Scouting for new players is easy too. A detailed breakdown of the player is given so you'll have all the info needed to make your decision. Then you put in your bid and see if it's accepted. Remember though, that top players are unlikely to accept offers from smaller clubs.

The many cup and league matches can be easily accessed and you'll have to bear in mind that in the European competitions and challenge matches, five subs are on the bench (with two available) and the three foreigner rule applies. League Cup winners automatically get a place in Europe.

Match highlights can now be printed out and shows man of the match and attendance. A full summary after each match gives you facts such as possession, shots at goal and the like. The full breakdown helps you plan future matches, consider your team's progress and spot up-and-coming talent.

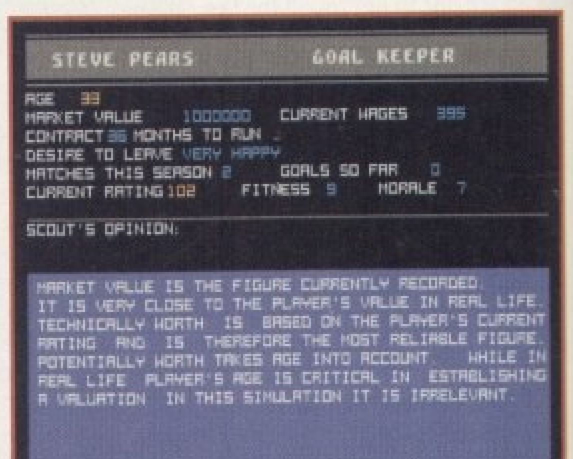
Tactical Manager 2 is being published by Black Legend and will be out very soon – footy management fans everywhere are gonna love it!



Watch your team progress and set tactics accordingly



View the other matches taking place – notice the cartoon characters



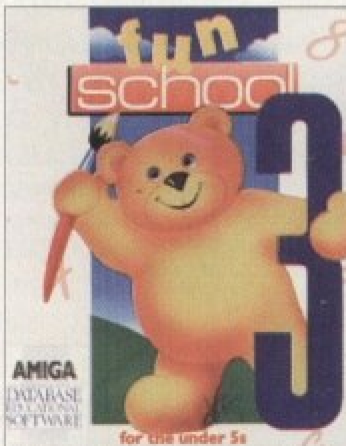
Keep an eye out for new players. Check their stats before you buy

Europress

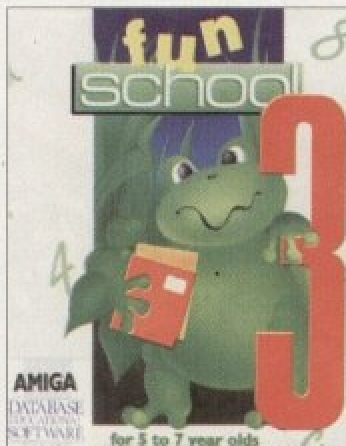
Europress Software is Britain's leading producer of educational & productivity programs for the Amiga.

Pictured here is the full range of packages currently available – home learning programs for under-fives upwards to the top-selling suite of home/business tools.

All designed to make the fullest use of the power of your Amiga.



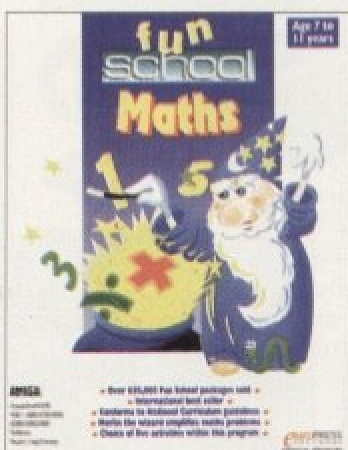
Fun School 3 (under 5).....£19.99



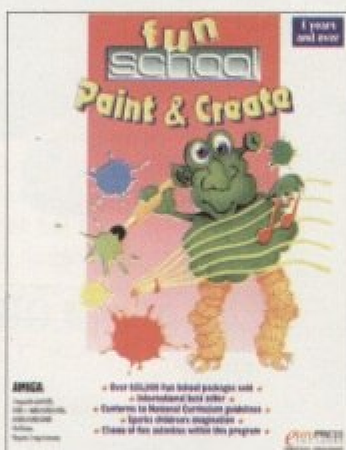
Fun School 3 (5-7)............£19.99



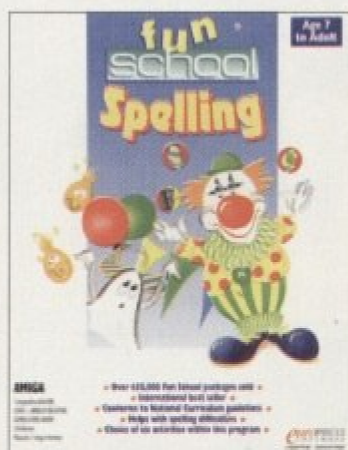
Fun School 3 (over 7's) £19.99



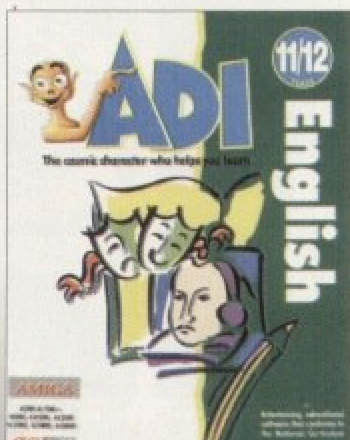
Fun School Maths.............£25.99



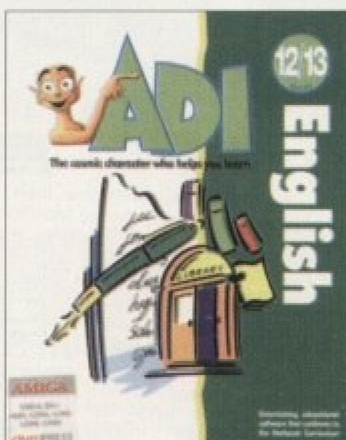
Fun School 4 Paint & Create.£25.99



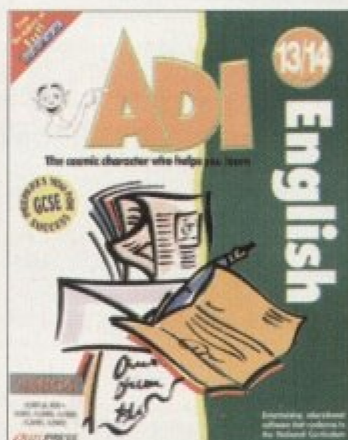
Fun School 4 Spelling £25.99



ADI English 11/12............£25.99



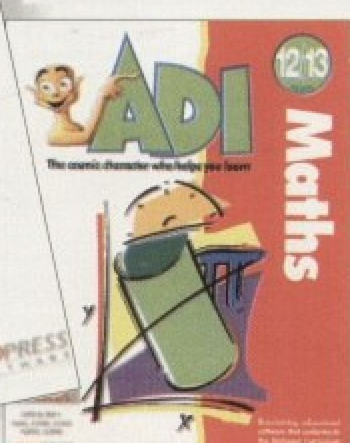
ADI English 12-13............£25.99



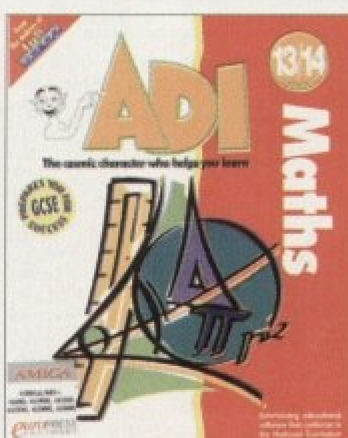
ADI English 13-14............£25.99



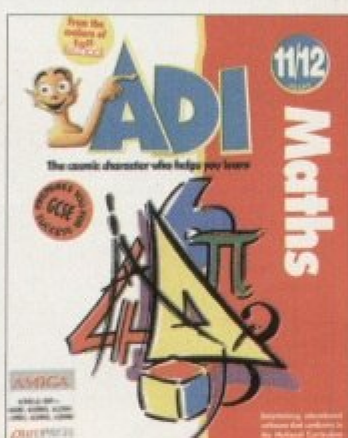
Mini Office £59.99



ADI Maths 12-13 ....£25.99



ADI Maths 13/14.............£25.99



ADI Maths 11-12 ....£25.99



Amiga
AMOS professional Compiler
Fun School 4 (under 5) £24.99
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Fun School 4 (7-11)...........£24.99
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ADI Junior Counting 6-7 .....£19.99
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ADI Junior Reading 6-7.......£19.99
ADI French 11-12 ....£25.99
ADI French 12-13 ....£28.99
ADI French 13/14 ....£25.99
ADI English GCSE £34.99
ADI French GCSE...............£34.99
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AMC 4/95

INTRODUCTION

These days it seems that computer flight simulations are becoming more complicated and more technologically advanced than the aircraft they're supposed to be simulating. Graphics of the highest quality and realistic sound effects place you right in the middle of the action and childhood dreams of becoming an ace fighter pilot are finally fulfilled.

Rowan Software are a company that have been at the forefront of computer flight simulation development. Their determination for making the simulation as authentic as possible has been noted and appreciated by true fans of the genre. Rowan's previous efforts, Reach for the Skies and Overlord, have been lusted after and consumed by thousands of flight sim aficionados. This is thanks to Rowan's expertise in getting the right mix between high-class, realistic graphics and solid, addictive gameplay.

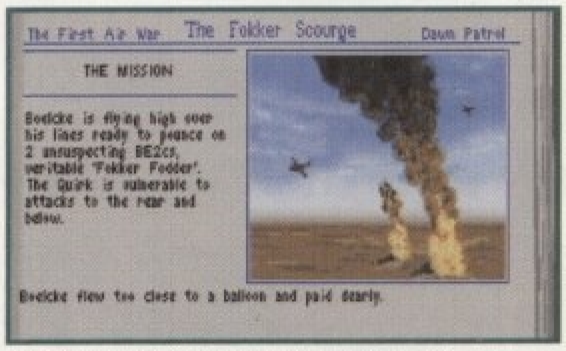
Some of the more aware gamers might be wondering what I'm blathering on about as Reach for the Skies and Overlord were not exactly the best flight sims to ever appear on the Amiga. It's because I was talking about the wonderful PC versions which are far superior to their bugged Amiga counterparts.

There are probably far too many reasons and not enough space in the magazine to explain why the PC versions are so much better, but as we all know, the Amiga is capable of producing some of the best games in the world.

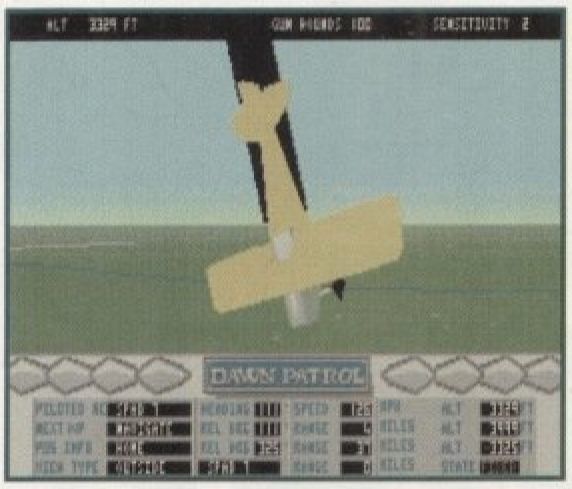
Rowan Software, in conjunction with Empire, have returned to the Amiga with yet another flight sim in tow. Dawn Patrol takes a trip back to World War 1 when you had to be really skilled to fly an aircraft and cheat death in it at the same time.

I've got my fingers crossed that Rowan Software have struck lucky at the third time of asking because I, for one, haven't played a decent flight simulation in a long long time.

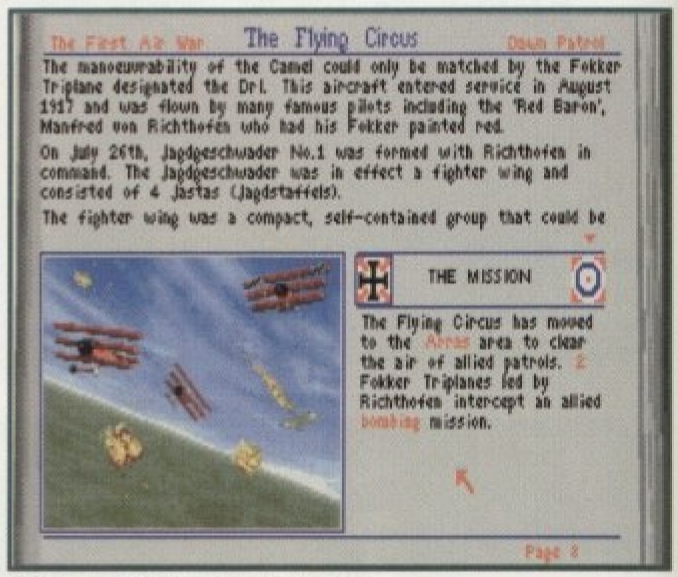
Dawn



Look how skilled I am. It's not every WW1 pilot that can guide his aircraft into a barrage balloon and end his mission in that kind of style



Yes, I think this is what you call a major problem. No ejector seat, no parachute, and black smoke is pouring out of my doomed plane. Crikey!



Before you decide to take to the skies you get full details on the mission and where it played its part in WW1 history

ADDITIONAL INFO 1

Seeing Dawn Patrol is a World War 1 flight simulation, I thought I'd give you a bit of background information on the event itself. World War 1 was fought between the Central European Powers (Germany, Austria-Hungry and their allies) and the Triple Entente (Britain, the British Empire, France, Russia and their allies).

It broke out on 28th June 1914 as the heir to the Austrian throne was assassinated in Sarajevo. A month later, Austria declared war on Serbia; as Russia mobilised, Germany declared war on Russia and France, and took a short cut into the west by invading Belgium. On the 4th August Britain declared war on Germany.

Three years of fighting passed and then in April 1917 the United States of America entered the war. On the 3rd March 1918 Soviet Russia signed the Treaty of Brest-Litovsk with Germany, ending Russian participation in the war.

Out on the Western front, Germany began a final offensive. In April the Allies appointed the French Marshal Foch supreme commander, but by June (when the first US troops went into battle) the Allies had lost all gains since 1915, and the Germans were on the River Marne.

The battle at Amiens marked the launch of the victorious Allied offensive. German capitulation began with naval mutinies at Kiel, followed by uprisings in the major cities. Kaiser Wilhelm II abdicated, and on the 11th November the armistice was signed.

On the 18th June 1919 the peace treaty of Versailles was completed. The USA signed a separate peace agreement with Germany and Austria in 1921.

It's estimated that 10 million lives were lost and twice that number were wounded in the first world war.

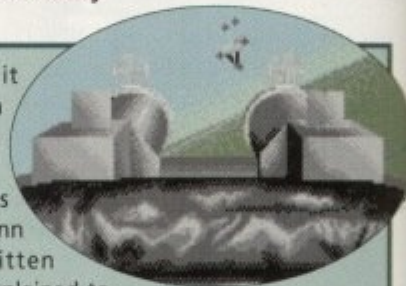
GRAPHICS

Graphically, Dawn Patrol isn't going to be able to match the PC version for sheer quality, but I have to admit that Rowan Software have done a mighty fine job and excelled themselves in the polygon department.

The external shots of the dog fighting planes are very impressive and the various planes have been reproduced as accurately as possible. As per usual you can view the action from any angle and get incredibly close to the action, or view it from a distance via the zoom feature.

The high level of detail is also worthy of a mention. The majority of action in Dawn Patrol is fought primarily in the sky so you'd think the ground details would be skipped over. Well, you'd be very wrong because even things like field guns are well done, even though you're only going to see them once in a blue moon.

One of Dawn Patrol's more interesting and very useful features is the interactive book which the whole game is structured around. You can select pilots and missions from the book, but it also takes you through the various flying manoeuvres.

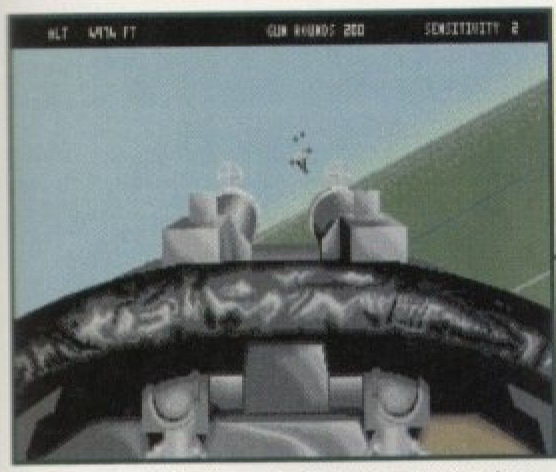


Normally, moves such as the Immelmann turn would be written down and carefully explained to you in a manual, but thanks to the interactive Dawn Patrol multimedia experience you get, via the same graphics taken from the game, to actually see the move performed from many different angles.

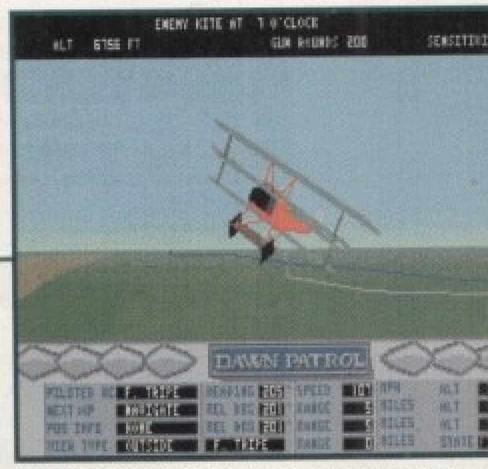
This novel and innovative idea helps beginners and experts alike to improve their flying skills, and for that reason alone it should be applauded from the rooftops and cheered at in the streets.

As far as World War 1 flight simulations go, Dawn Patrol has just taken first place in the looks handicap hurdle chase, but remember most of the time you will be, or at least should be looking at blue sky.

82%



Yes, I've travelled miles and miles to face my toughest opponent in the skies yet – a barrage balloon



Ah-ha! We meet in the skies at long last, Mr Red Baron. Take your Fokker and run for cover



Patrol



Chocks away chaps, reach for the skies, tally-ho and many more WW1 stereotypical catch phrases, none of which you'll find in Jonathan Maddock's review of Rowan Software's latest flighty offering

SOUND

This always seems to be one of the most forgotten elements in the history of flight simulations. Sound may not be as important as graphics or gameplay, but without it the whole game can suffer and become a complete flop.

Luckily, the person in charge of the noises and tunes department at Rowan Software hasn't got a short memory span as Dawn Patrol contains some of the best sounds I've ever heard in a flight simulation.

The game kicks off with a tune loosely based around 'The Last Post' and then evolves into a sprawling classical piece of music which is more than appropriate for this type of game. There are a couple of instruments within the tune that could get on your nerves after a while, but thankfully you can turn it off via the options screen.

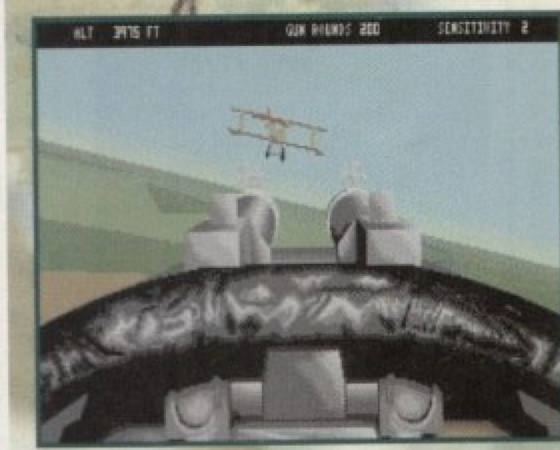
What really gives Dawn Patrol that much-needed boost of atmosphere are the sound effects. The superb droning of the engine doesn't really come into play unless you change the speed of your aircraft, but when you do it's remarkably impressive

For some bizarre reason the noise of your gun firing is twice as loud as everything else and this isn't such a bad thing as it gets your adrenaline pumping that little bit faster – don't ask me why .

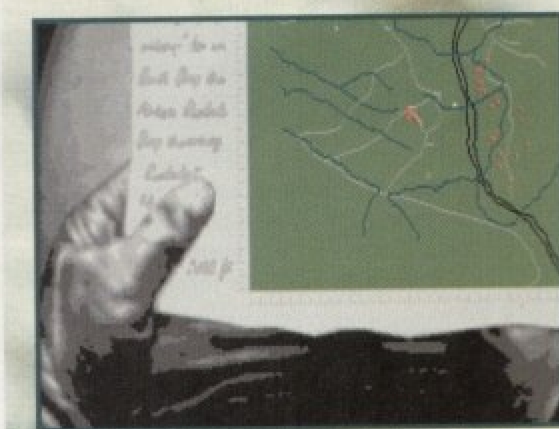
There you have it, a tune you can either take or leave alone and a whole bunch of superb sound effects that transport you back to 1914.

80%

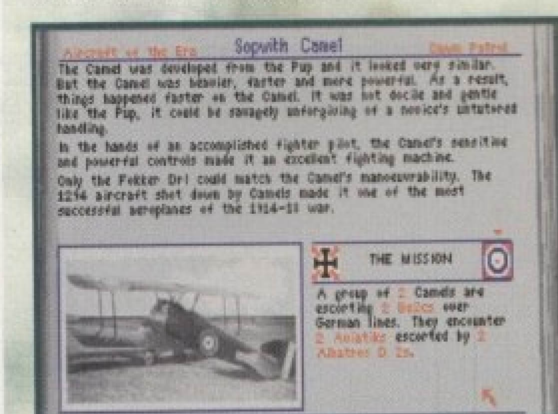
> Ride on! ride on in majesty!
> The winged squadrons of the sky
> Look down with sad and wond'ring eyes
> To see the approaching sacrifice



"I have you now Skywalker!" Yes you too can play out all your Star Wars' fantasies courtesy of Dawn Patrol, and remember the force will be with you...always



That ever-so handy map option. Really useful when you're flying in the sky and, of course, it's not too windy up there is it!



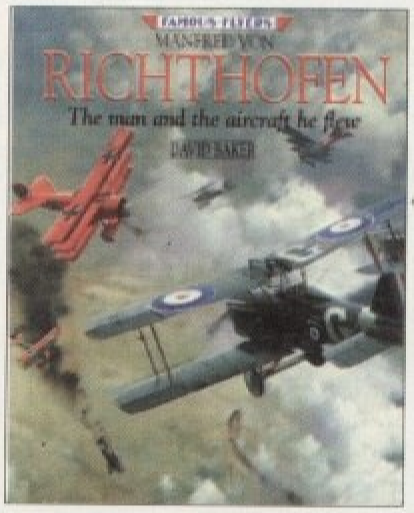
Another chapter in the Dawn Patrol interactive book deals with the planes of the era and you get to fly a mission involving your chosen plane

ADDITIONAL INFO 2

A free limited edition book comes with the Dawn Patrol package. It's titled 'Richthofen: The man and the aircraft he flew' and is all about Germany's top scoring air ace from World War 1.

Contained within the pages are superb, specially commissioned, full-colour artwork as well as accurate profiles and detailed technical sketches of all the aircraft from the era. Richthofen, although he flew many different kinds of aircraft, became famous for flying one of the highly distinctive all-red Triplanes.

Richthofen scored his last 17 victories in Triplanes and it was while flying one of



these aircraft that he met his end on April 21st, 1918. The Fokker Dr. I Triplane's better qualities were its handling agility and good climbing rate, and this made it very popular with the leading air aces of the day. The craft had very little impact on the air war and if it wasn't for men like Baron Von Richthofen, it wouldn't have even got a mention in the history books.

Back to the present day, and there isn't one Fokker Triplane that exists in a flying condition. Due to the ravages of time and the destruction caused by the second World War, there isn't even one which could be restored to its former flying glory.

Fans of World War 1 and anyone who has a love for planes will love the 'Richthofen' book and it's nice to see a company taking the time and trouble to produce a 'free' gift of astounding quality that perfectly complements the game.



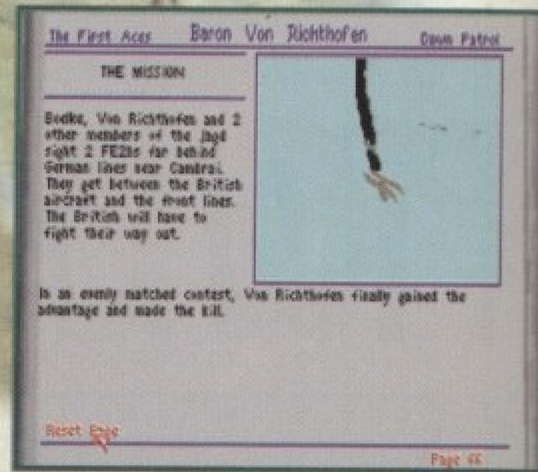
A right-side view and I spot a plane with a rather fancy purple paint job, but is it one of ours or one of theirs?







A nice bit of formation flying from the British 'We're a bit clever in our aircraft, but we still can't loop the loop' WW1 stunt team



You can choose between several pilot's and get the chance to fly some of their career missions. This time I've chosen Baron Von Richthofen otherwise known as the 'Red Baron'



One of the nice touches within Dawn Patrol is the interactive book around which the whole structure of the game is based. Here, for instance, you can learn how to do perform the Immelmann Turn to perfection via words and pictures

- Publisher: Empire
- Developer: Rowan Software
- Disks: 3
- Price: £34.99
- Genre: Flight Sim
- Hard Disk Install: Yes
- Control System: Joystick/Mouse/Keyboard
- Supports: A500/600, A1200/4000
- Recommended: 68020

OPINION 88%

I've been waiting for Dawn Patrol for ages, ever since I saw it on the PC, and I'm happy to say that this time Rowan Software have failed to disappoint me and delivered the goods in pristine condition.

The first thing that impressed once I'd actually got into the game was just how fast it was. Okay, I was using an A1200, but imagine by surprise when it moved almost as fast on an A500. Everything seems to have been carefully thought about and it certainly looks like Rowan Software have learnt from their previous two Amiga flight simulations.

Novel ideas like the interactive book of the air war really go some way to making Dawn Patrol a bit of a classic in the simulation stakes. There are over 150 historically accurate missions to fly in and you're going to have to be an astounding pilot to finish them all within a couple of weeks. In the durability stakes, Dawn Patrol isn't going to last longer than a piece of Willy Wonka's everlasting bubble gum, but hey it's pretty damn close.

I've never been amazed by games from this genre, but I've been very impressed by Dawn Patrol and more importantly I've had a lot of fun making my way through the game. It's not going to be everyone's cup of tea and I'm sure I've missed things like 'the altimeter not being the right' size and 'the colour of the front of the Sopwith Camel is a couple of shades out', but it plays well and that's the main thing.

AMIGA GOLD AWARD

Anyone that has a slight interest in planes should make this an essential purchase and as for fans of the aircraft that flew in the first world war, you're going to fall in love with Dawn Patrol.

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INTRODUCTION

Racing games have a long history in computer entertainment. It seems the thrills of the track provide all the necessary elements of a good action game: Adrenaline, destruction, competition and the need for a cool head under pressure.

Originally the basic graphics on computers only allowed for the overhead style of racing, but before long these were abandoned as everybody tried to simulate the sight of blurring scenery from the cockpit view of the car. Some attempts were good, some were bad, but one thing was certain: 2D was out, 3D was in.

Now, however, the old fashioned overhead view is making a come back. Over the past year, down-under developers Acid and Vision brought us the highly acclaimed Skidmarks II and Roadkill, both of which made up for the lack of on-the-track realism with quirky features and challenging gameplay.

For some reason there's always something dirtier about this type of game: Forget Silverstone, these games are about the rough and tumble of racing round dust tracks or annihilating rivals with futuristic weaponry. And true to form, Team 17's ATR is suitably unwholesome.



Before the race make sure you equip your car wisely



The sports track, and I'm actually in first place !



Don't relax because you're on the road – obstacles like cones will slow you down



Screeching round the canyon, I hit the ramp and raced for the cash



It's all very scenic as you zoom through tunnels and over streams



A roll in the snow – the Alpine challenge gets to me



The ice will put players in a spin if they accelerate at the wrong moment



Battle mode: He was getting away so I launched a missile

TWO-PLAYER MODE

Players can duel with friends by playing the battle variation of the game, a head-to-head race with a difference. Including a two-player mode was a natural choice for Team 17, but their idea is unusual because they obviously decided to avoid using a split screen.

This means that both players must stay on screen at the same time, so what happens if one person lags too far behind? Well, if the chasing player is about to disappear off-screen the computer automatically makes them catch up. By forcing the opponent into this position, however, the leading player scores a point.

In fact, this is the whole point of the battle mode. Each player struggles to keep ahead so they can score points off the enemy, picking up power-ups on the way to help them along. At the end of a race, the computer counts up the points for a winner.

To give this version of the game an added edge, extra power-ups that are unavailable in arcade mode have been included. Roadkill fans will be pleased to hear that these include missiles and mines that can be used to take the wind out of your mate's sails.

STORYLINE

Team 17 games are notoriously tricky – often too tricky for me. Everyone raved about Super Stardust, for example, but I felt sad and left out because I couldn't do it. I know, though, that this is because I'm past it, and I can only hope that one day they'll include a zimmer-frame mode for people like me.

Mercifully, ATR is very challenging but nowhere near as tough as I thought when I started it. Anticipating the bends is undoubtedly trickier than in the rival games, and as tracks peter out players will find themselves ploughing off into the cones in a moment of misjudgement. This, however, is all part of the fun and eventually players learn from their mistakes.

Winning from the outset is virtually impossible. In the arcade mode players are matched against four computer opponents, two of which instantly zoom off over the horizon from the moment the starting lights turn green.

This gives ATR more of a long-term challenge than its rivals, because the route to success involves more than a large helping of arcade skills. Yes, folks, there's some rudimentary tactics involved.

Players start the game with $4000 to spend on their kit. Their main expense will be the car, with ATR offering a choice of jeep, buggy or formula racer. Each of these motors has its own strengths and weaknesses.

This leaves you with a small amount of money to make customised improvements. Acceleration and traction upgrades are a good choice to start with, but bigger engines can give you higher top speeds while power brakes and steering give better handling

Of course you can only afford a bit at a time, and ultimately it all comes down to your success on the track. Gain some modest success by coming third in a few races and you will soon start noticing the rewards in your newly souped-up vehicle.

These enhancements are important, but players must also keep their eyes peeled for power-ups during the races. These are tricky to get and opponents compete for them, but the key to success is to keep your priorities on completing the race.

89%

All Terrain Racing

Following on the heels of two top-notch overhead racing games from New Zealand, Team 17 have released a home grown, turbo-charged rival. Gareth Lofthouse heads off track

GRAPHICS

True, ATR is no Daytona USA. The view is from the top, which means you can forget the sensation of burning tarmac because this game's attractions are of a different nature. But this does not deduct from the fact that this is by far the best-looking offering in the genre I've seen on the Amiga.

Though the player looks down on the track, this doesn't mean it's a 2D game. Each car is a 3D model viewed from a 45 degree angle – similar to Skidmarks but better drawn in my opinion.

The stars of the show, however, are the tracks themselves. Treacherous loops and lethal crossovers are all there to throw you off balance, but you expect these things (at least you should by now). It's the fact that in some terrains the road disappears altogether which makes this a novel experience, both to play and look at.

ATR has three types of terrain to race on, ranging from obstacle ridden race tracks to white knuckle rides down narrow canyons or slide and smash battles in the Alpine snow.

The sports circuits are the closest you'll get to the traditional racing game, but there's still plenty to keep the eye alert. Ramps and cones can help or hinder, and the familiar gleaming oil spill makes a reappearance, sending you spinning into the barriers. Less predictably, sand and water make a later appearance, as do the Team 17 offices – allegedly.

However, it's only after choosing the canyon or alpine tracks that the game takes on a more distinctive appearance. Racing through the canyons, for example, will have players disappearing through tunnels or splashing through streams. By contrast, the Alpine experience involves icy conditions, evergreen forests, and narrow log tracks.

ATR offers more colour, more detail and more variety in the graphics department than any of its rivals. It may not leave its players gob-smacked but no-one could deny that it looks a lot of fun.

88%



SOUND

Racing games only really need two sounds: The noise of the engine and the noise of the crash. Still, titles like Roadkill introduced speech and other effects to show how small extras could help boost the atmosphere.

Unfortunately, ATR does not shine in this area. There's a light-hearted, upbeat tune playing in the background as you race, and snaffling a power-up results in a satisfying twinkly noise. On the whole, however, it's adequate but unexceptional.

65%

- Publisher: Team 17
- Developer: Team 17
- Disks: 2
- Price: £25.99
- Genre: Overhead racer
- Hard disk install: No
- Control system: Joystick/keyboard
- Supports: All Amigas
- Recommended: 68000

OPINION

89%

AMIGA COMPUTING GOLD AWARD

Given that there were a couple of acclaimed games in the same vein released recently, is there room for another overhead racer from Team 17? I was sceptical, but thankfully ATR was done so professionally that it won me round.

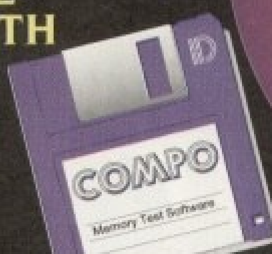
On the balance of things it beats its predecessors because of a greater long-term incentive. The rewards of winning the money, then spending it to soup up my motor filled me with a boyish flush of satisfaction – and that's the sort of thing to keep a player going.

The two-player mode is different, though I'm not sure it works as well as the designers hoped. Otherwise it's got the looks, the features and the speed to take the chequered flag. Go forth and spend your money.

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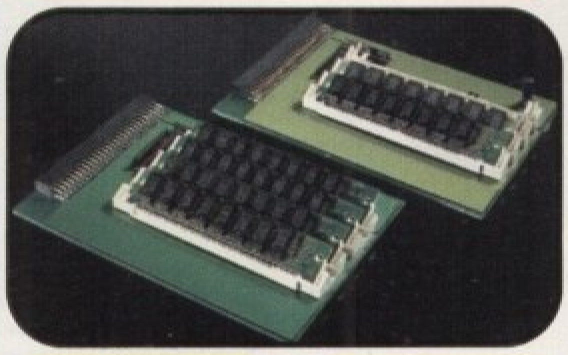
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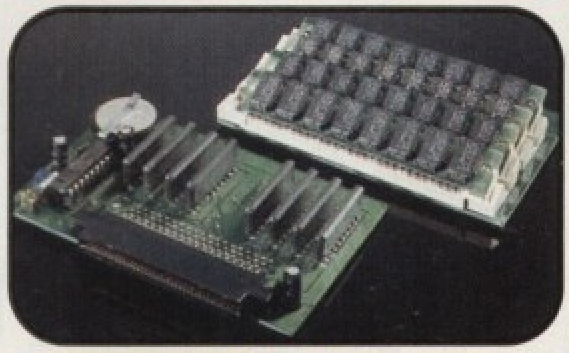
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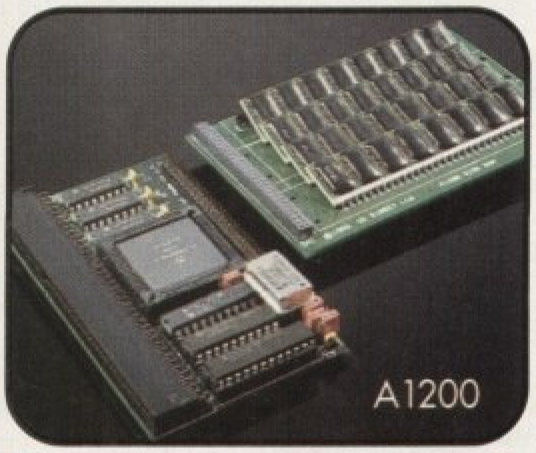
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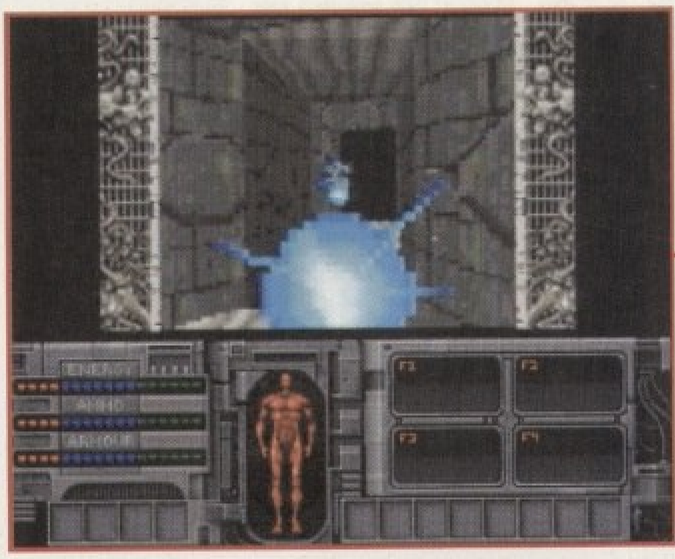
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A couple of seconds into the level and you wander into somebody who has obviously taken an early dislike to you



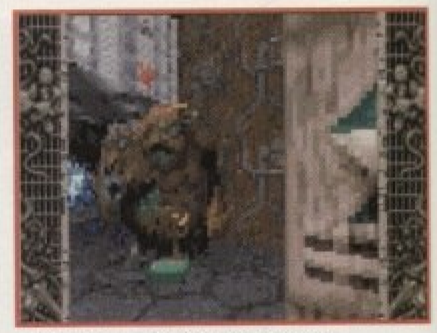
For those people at home, never taunt an alien when it's right in front of your face



There are plenty of nifty special effects to be found in the game.

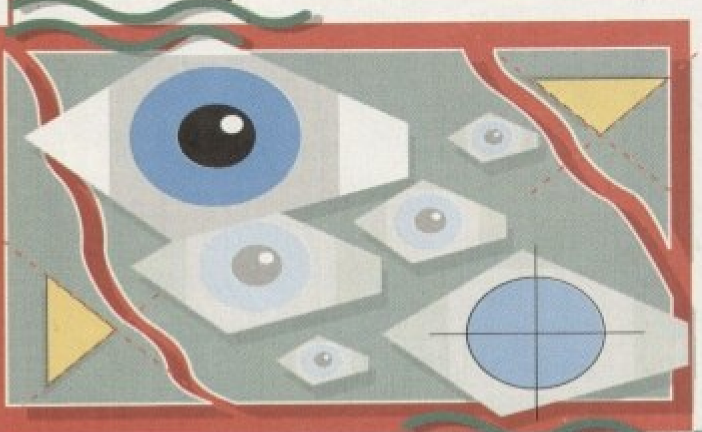


The layouts of the various levels have been well thought out



It's a, err, mouldy potato on legs packing a serious piece of gun power.

system preview



Alien

In Wakefield no-one can hear you scream! Jonathan Maddock keeps an eye out for acid-drooling aliens while taking a sneaky look at Team 17's journey into the third dimension.

If I was asked to name who I thought were Britain's best Amiga software developers/publishers, without a moment's hesitation I would scream "Team 17" at you. If you need any proof, you only have to take a quick glance through their back catalogue of successes.

Project X, Superfrog, Arcade Pool, Super Stardust, Body Blows, Qwak, F17 Challenge, Assassin, Overdrive, the list is as strong as it is long, but which game did Team 17 kick off their run to games stardom with?

Loosely (ahem!) based around James Cameron's movie Aliens, Alien Breed took the gaming world by storm and was hailed by critics and punters alike as an instant Amiga classic. The game that's guaranteed a spot in anyone's disk box had a distinct Gauntlet feel to it and featured more aliens than you could shake a pulse rifle at.

Due to its enormous popularity, Team 17 decided to release an enhanced version of the arcade adventure. This 'widescreen' alien-fest featured loads more levels and was titled Alien Breed '92: The Special Edition as a reflection on the then current video release.

Alien Breed '92 smashed Gallup chart records and remained at the number one spot for an unbelievable 33 weeks, and still to this day that record hasn't been broken! Luckily for the Wakefield-based software house, gamers were still as enthusiastic about Alien Breed and begged for more. Not a company to ignore demand, Team 17 set to work on a full-blown sequel. Alien Breed 2 didn't make such a dramatic impact as the original game, but it was a tough shoot-'em-up that fans of the genre were more than happy with. Last year Alien Breed: Tower Assault was released and by taking contributions and ideas from the public, Team 17 managed to create the ultimate and very last Alien Breed adventure.

After four games in four years it is finally game over for the Alien Breed arcade adventures. Or is it? The news that Team 17 had yet another Aliens-inspired game up their sleeves no doubt left several fans with huge grins on their faces. Where can Team 17 go with this new assault on the gaming charts? This time the Teamies are heading off into the third dimension, so sit back and prepare yourselves! Alien Breed 3D is on its way and after seeing it with my own eyes, I guarantee it will amaze and impress you.

It's already being tipped as the best Doom-style game for the Amiga and Team 17 are confident that their game can live up to its billing. Alien Breed 3D almost came about by accident – originally Team 17 were discussing whether to do the game for PCs only, but then Doom was released and they decided not to bother with the idea.

Martyn Brown, one of the head gurus at Team 17, was reading through some stuff on the Internet and read a message from a maths student studying at York University. The student had an Alien Breed-style Doom game for the Amiga and wondered if Team 17 were interested in it. One meeting later and Team 17 had Alien Breed 3D signed, sealed and delivered.

The game will contain some of the best elements from the previous Alien Breeds, but this time you're the one being hunted. The 3D universe is completely texture mapped and features loads of really nifty special effects.

Alien inspiration?

Back in 1979 a sci-fi chiller directed by Ridley Scott hit the big screen. Featuring Sigourney Weaver, a slavering and downright scary alien and some Oscar-winning special effects, Alien was the film that started the ball rolling.

The sequel arrived in 1986, but this time direction was by James Cameron who was responsible for movies such as the Abyss and Terminator. Sigourney Weaver returned as Ripley and fought the aliens on their own turf. More action-packed than its predecessor, with better special effects and a dark, moody atmosphere, Aliens rapidly became a box office classic.

Team 17 can thank the creators of the Alien films because without them Alien Breed wouldn't even exist. As well as being damn fine computer games, they also sold well because of the enormous popularity of the films.

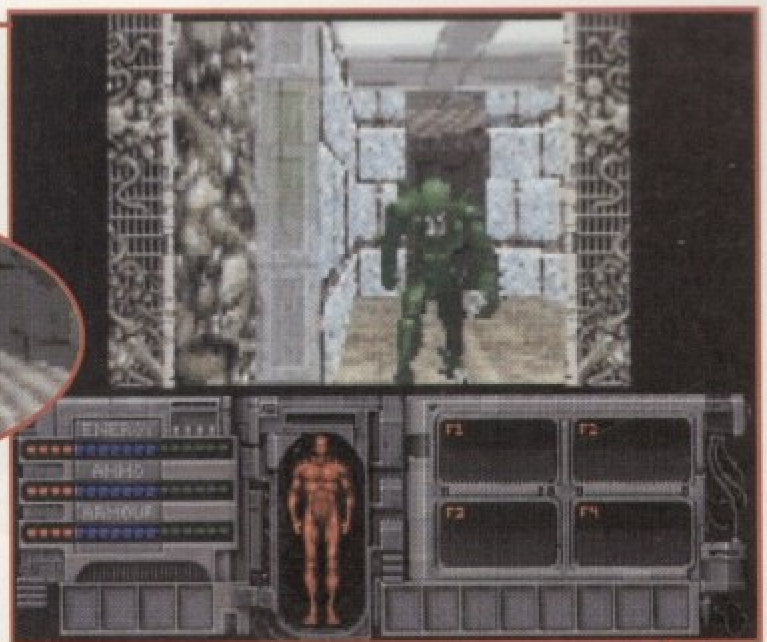
If all TV/film licenses were like Alien Breed (even though it wasn't one) then I would be the happiest person on Earth. System doff their collective hats to anyone involved in the three Alien films and to the person who conceived the original idea for the Alien Breed games.



One of the marines lets a couple of warning shots go off down the corridor. I'd save your ammo if I were you mate!



Littered around the various levels are plenty of weapons, some more fearsome and more powerful than others. Let's try this one out



See, a bit of erratic shooting and look what happens! I wouldn't hang about and make friends. Blow him away!

Breed 3D

Graphically, it's a complete departure from the original, but Team 17 have promised to keep the suspense and atmosphere to a high standard.

Alien Breed 3D will feature over 20 levels of super-smooth, 360 degree 3D movement and this means no jerks and no sudden 45 degree turns. The graphics will be fully texture mapped and Gouraud shaded.

Enemies will include several new nasties as well as the more common aliens. The development crew are working hard to get the enemy intelligence just right. Instead of just wandering aimlessly around the 3D corridors, the enemy will, hopefully, be able to hear you and seek you out through sound as well as vision.

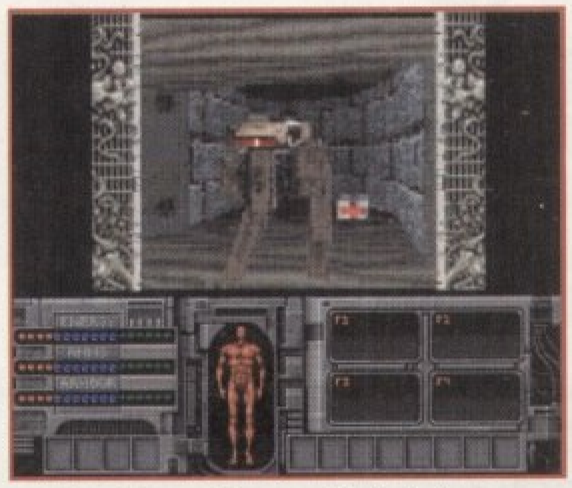
DOUBLE DELIGHTS

The previous Alien Breed games have been noted for their two-player feature and Alien Breed 3D will not be an exception to that rule. A split-screen mode was thought about but proved impossible, but there is now a two-player mode via a serial link. This is good news if you want to play a bit of alien blasting with a chum because you don't need two copies of the game to play link-up.

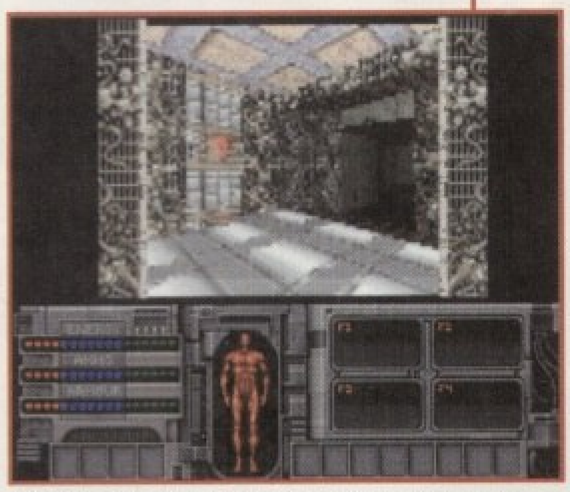
Team 17 are also planning to have a vicious and violent Doom-style, head-to-head, two-player mode in the finished version of the game. This is where players can run amok around the level, picking up various amounts of firepower and first-aid kits. Once you're tooled up to the nines you can track down your chum and blast them to smithereens.

Take a casual glance at the screenshots and you may not be that impressed, but wait until you see the game in action. Words fail to describe just how good Alien Breed 3D is looking and if everything goes to plan you should be seeing it around April/May time.

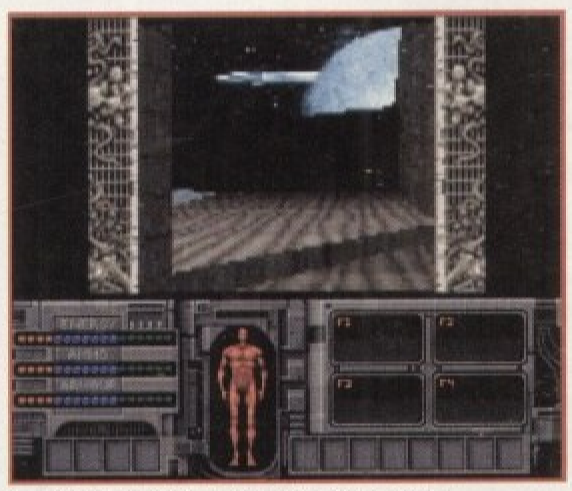
Team 17 believe that their forthcoming blast-away is their most ambitious Amiga project to date, but they're also confident that it could become one of their biggest ever hits.



As well as aliens roaming around the levels there are plenty of new creatures to be found within the Alien Breed world, including rampant robots



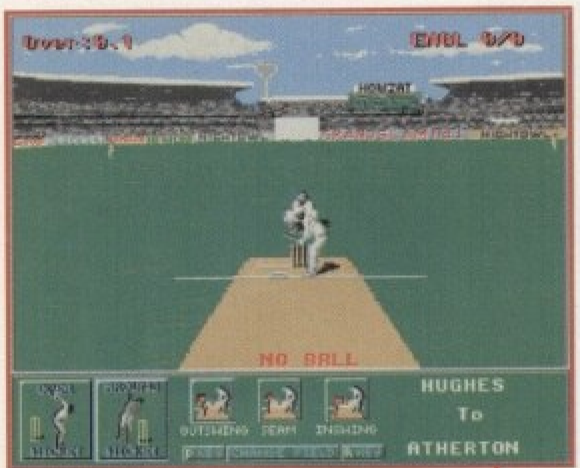
Alien Breed 3D will amaze you and these screenshots don't really do the game any justice whatsoever. Wait until you see it moving



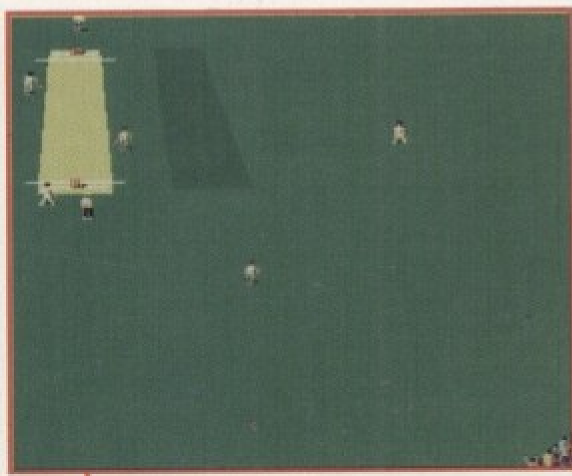
An exterior shot from the game, and look the moon's out. In a real game of AB-3D I, of course, wouldn't be standing staring at objects in the sky



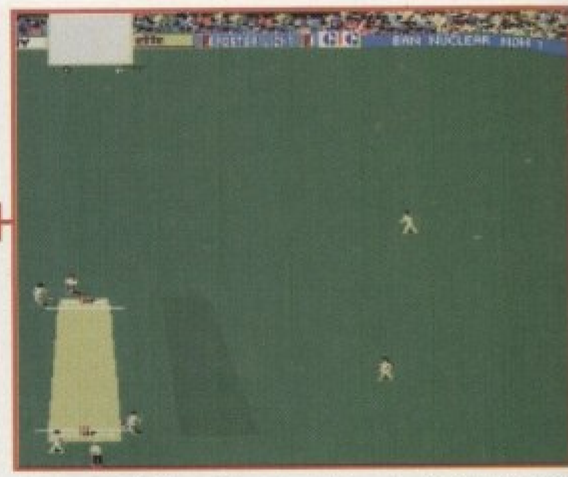
Before you all complain about this gruesome scene, let's just remember that alien stole my wife and kids and deserved to die



It's Cricket promises to be a good-looking game with an authentic match feel

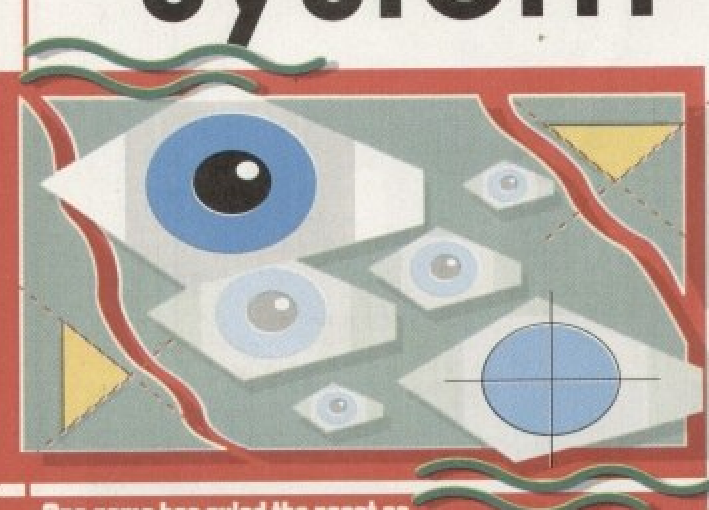


The wide view of the field will help you organise the fielders



Once your fielder catches the ball he should throw it back to the wicket so some exciting run-outs can be achieved

system preview



It's

One game has ruled the roost as far as Amiga cricket simulations go. But all that could be set to change because there are new players on the team. Tina Hackett checks out their credentials...

Sports games come in all shapes and sizes. Everything from ski-ing and football to the javelin is covered and there is nothing more sociable than sitting down with a friend or two in a competitive bout of a simulation of your favourite sport. Many an argument has broken out, even here in the office, over who was the Goal! champ, who could outdo who at golf, and who was the ultimate tennis victor.

And of course, cricket. Personally, cricket has never really turned me from a rational games player into a person possessed, but I've seen it done. Yes, right here in the *Amiga Computing* office. I've seen my colleagues turn from fairly composed people into frenzied maniacs with the only intent being to pummel their opponents into the ground. It certainly changed my perception of the game. Gone are the images of cream teas in the pavilion, crisp, white slacks and a polite ripple of applause for scoring a six. This is the tough edge of competitiveness and it's not for the faint-hearted.

There haven't been all that many cricket games but the ones there are, the ones responsible for all the disruption and disputes in the office, have changed the nature of a game from one that was played on the village green in front of the vicar to a tough sport that separates the men (and women) from the boys. "It was Audiogenic who started the ball rolling, so to speak, with their Graham Gooch's World Class Cricket and the many add-on and updates that followed. But now, courtesy of Grandslam and Nightowl Software, there is a new contender ready to cause a stir in the cricketing fraternity.

Called simply, It's Cricket (so as not to cause any confusion as to the content of the game!), it revolves around the International Test Matches. It is a fully comprehensive simulation of five-day cricket and if you've ever dreamt about playing for your country, the chance will soon be yours.

PICK A TEAM

There are nine countries to choose from with 18 players per team. You can play against a friend or a computer-controlled opponent in a game that will require tactics as well as skill.

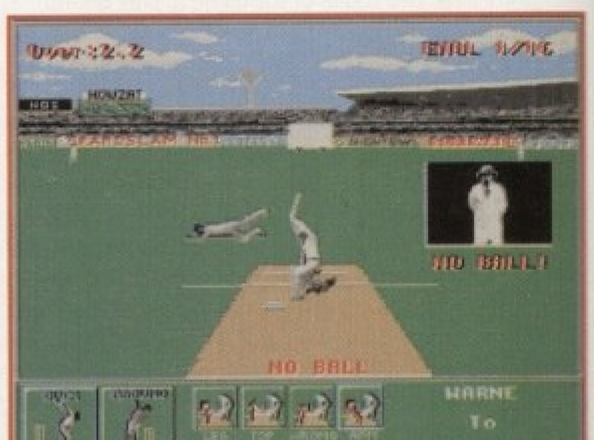
A great deal of attention to making the game as realistic as possible has been included. The graphics, for instance, feature digitised players and an elaborate grandstand with full crowd details. The sprites move authentically thanks to some smooth animation, and animated sequences, such as umpires giving decisions, add a nice touch.

The sound features digitised speech for authentic commentary and many distinctive samples that have become almost trademarks for cricket are included. A chunky crowd effect compliments the atmosphere with an authentic sound that would be equally at home at the Cup Final at Wembley as at a Test Match. The pacey introduction tune demands attention too.

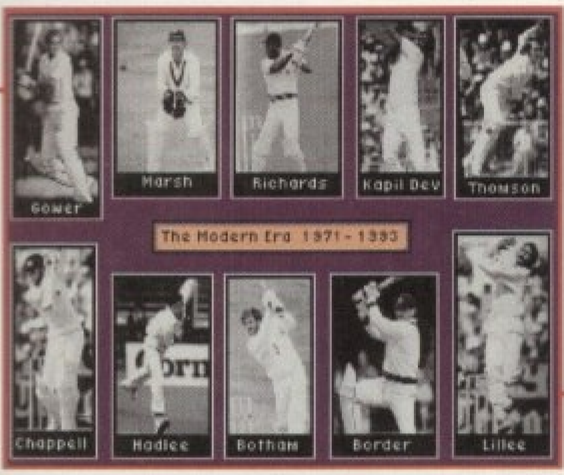
It's Cricket will appeal to the sports stats fans as well as it promises a good section of player profiles and playing statistics. Click on your favourite player, check out his bowling skills, how many runs scored, innings and the like. All this is shown with a realistic digitised photo and you can also add your own images by simply loading up a paint package, replacing the photo with one of your own and then including all personal statistics.

The game includes a management angle because you need to select a team by weighing up the stats, comparing your players and picking the best men for the job. It's not just going to be a case of thwack the ball and hope for the best – there's going to be skill involved in the management and the actual cricket itself.

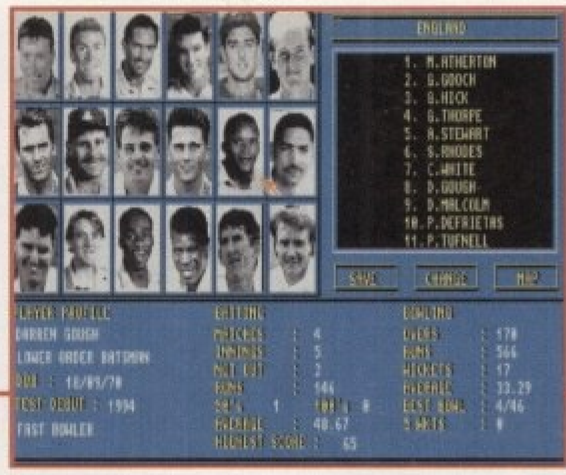
Actions are executed by a mixture of either mouse or joystick, depending on your preference and whether you are batting or bowling. Play is easily carried out and when bowling, for example, you click on the



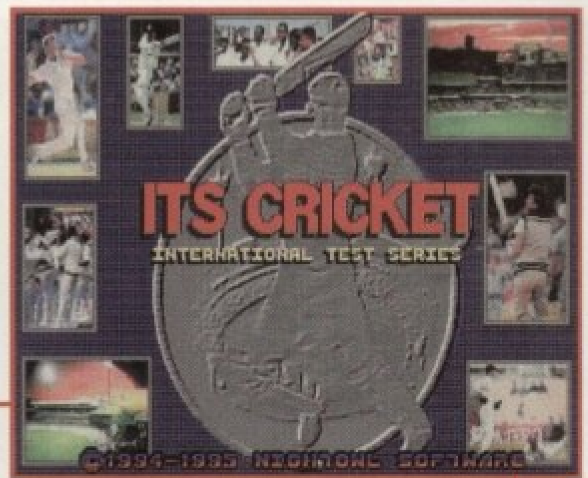
The animations, like this Umpire decision, work well



Digitised pictures are used throughout – this introduction, for example, is a nice touch



By clicking on your player's photo you can access all their vital info



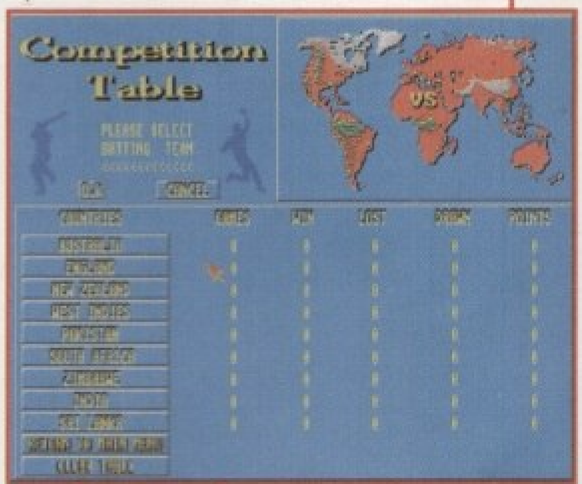
It's Cricket – finally a challenger to Graham Gooch's Cricket?

appropriate icon, choose whether to bowl over or around the wicket then choose the type of ball. Pace or spin bowling is determined by the player's attribute in the Player's Profile.

Batting is easily performed too. Look out for the marker where the ball will land and move your batsman accordingly. The number of times you click on the joystick determines how you hit the ball. Press the joystick button twice and direct it left and you will achieve a Square Cut whereas one press and down will mean a low defensive hit. It's a different approach to Graham Gooch but one I'm sure will find favour with even the most fanatical Gooch's Cricket fans.

Two views are available to enable you to perform effective outfield catching. You can either view from side-on or from the rear and it is vital to position your outfielder accurately. Moving the fielder is a simple operation – just press the mouse button in the appropriate direction. When you are batting you can run between wickets by pressing the joystick button once. For additional runs move the joystick up for the top wicket and down for the bottom wicket. When you are on the bowling side, click on any of your fielders to try and catch the ball, then when one of them has it, aim at the wickets and press the mouse button – all designed to provide exciting run-outs.

The team behind It's Cricket are Nightowl Software and employ the talents of Joseph Sultana – Producer, Albert Chan –Senior Programmer, Jason Chan – Programmer and Audio, and Phillip Wong – Project Manager. It will be available for the A500/A1200/A4000, priced £26.99. I suspect there will be a good deal more added to It's Cricket in the future as

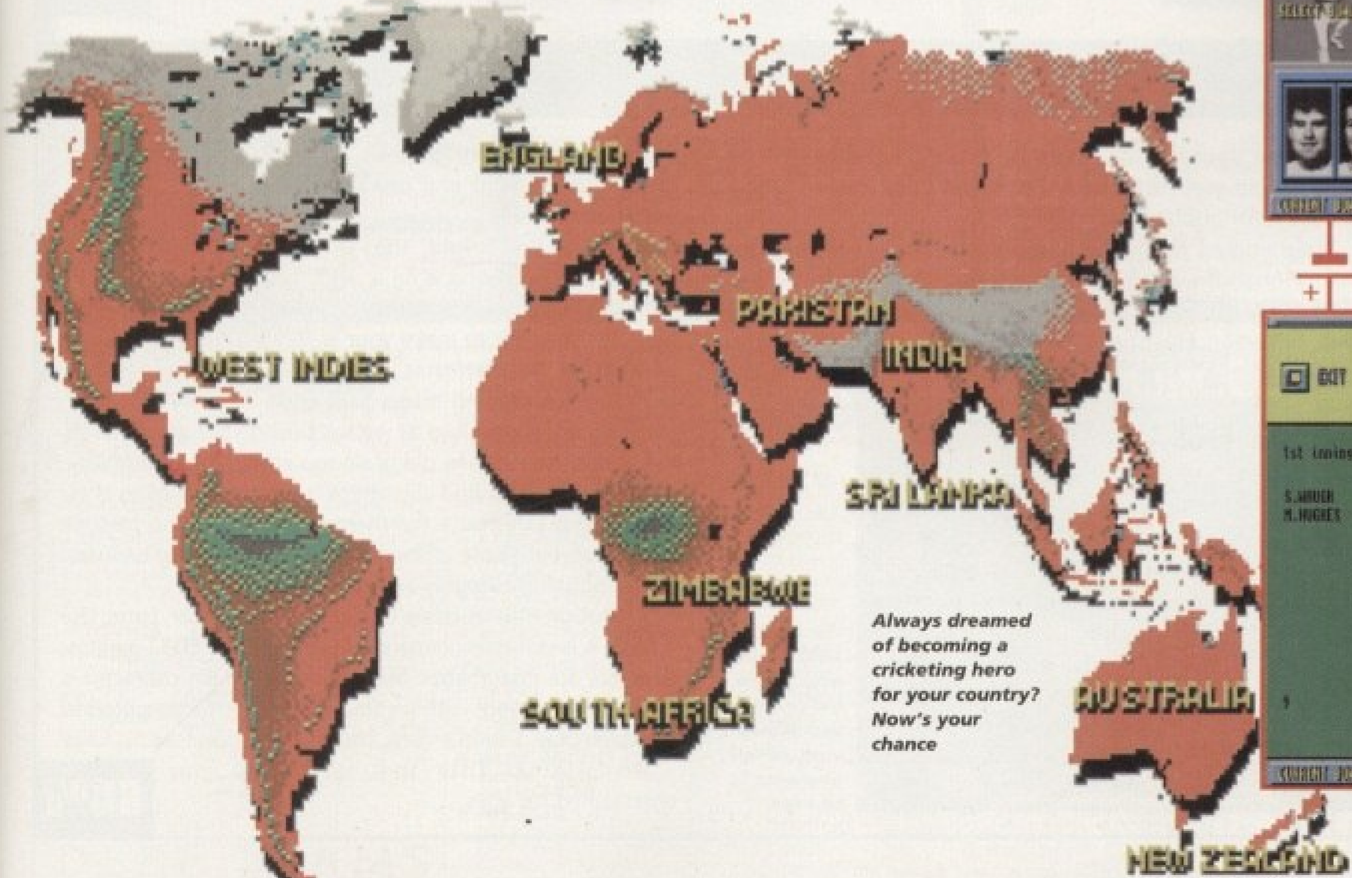


The competition table compiles all the information for the Test Match

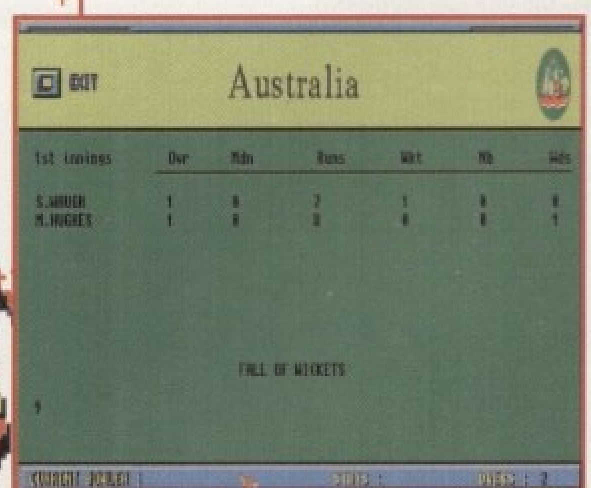
cricket!



Score cards will be a good source of information



Always dreamed of becoming a cricketing hero for your country? Now's your chance



Compare the results' tables after a match well-played

system essentials



Tina Hackett brings you the latest and greatest from the world of re-releases. This month we look at Core Design's Skeleton Krew and Psygnosis' Benefactor, both for the CD32.



Comic book graphics make Skeleton Krew stand out despite the mediocre gameplay

Skeleton Krew

The Krew are back in town and ready to hit the CD32. Core Design's shoot-'em-up, Skeleton Krew, appeared on the A1200 recently and received our System Gold Award. And now it's here ready to blast its way on to a CD32 near you.

Set in 2062, bad guy Moribund Kadaver has taken over a kryogenics plant and is busily turning the kryogenics into mutated Psykogenix. This nasty lot start to force the population from their homes and the place becomes over run. Only one gang can stop the mayhem – the Skeleton Krew. You can join these mercenaries, playing as either Spine, Joint or Rib, and with weapons in hand, try and put an end to the chaos.



A 3D isometric view works well in showing the fast-paced action

Viewed from a 3D top-down isometric view, it is an eight-way scrolling, out-and-out blast fest. It's all your usual shoot-'em-up fayre but it differs in employing a rather unique graphical style. A dark futuristic atmosphere is portrayed well through the comic book characters that would look equally at home in 2000 AD stories, and the brilliantly drawn high-tech backdrops.

Sound is exceptional too, with a strong dance track pounding in the background. Gun blasts, yelps and explosions compliment the action and give a sense of satisfaction after each baddy is destroyed. The in-game music really is good quality which makes a nice change to a lot of the accompanying dross we get these days. It all looks very impressive with huge end-of-level guardians to destroy, a multitude of evil mutants to blast in to oblivion, and two effective weapons to do it with. Unfortunately though, it's not all that varied. It's a very challenging game but it can become rather repetitive. If pure shoot-'em-ups are your bag then it is a good example of its genre, but the average gamesplayer will demand a bit more to challenge the grey matter.

- Publisher: Core Design
- Developer: In-house
- Disks 1 CD
- Price: £34.99
- Genre: Shoot-'em-up
- Hard disk install: N/A
- Control system: Joypad
- Supports: CD32
- Recommended: N/A

78%

Benefactor

- Publisher: Psygnosis
- Developer: Digital Illusions
- Disks: 1 CD
- Price: £19.99
- Genre: Puzzler/Platformer
- Hard Disk Install: N/A
- Control System: Joypad
- Supports: CD32
- Recommended: N/A

Benefactor appeared on floppy quite a while back. Now it's been ported over from the A1200 for all CD32 owners with a penchant for puzzley platformers.

Programmed by Digital Illusions, who are renowned for their Pinball Dreams/Fantasies/Illusions, the game was well received by the public and reviewers alike. It is a strange mixture between Flashback (arcadey adventure style) and Lemmings (miniature graphics and puzzle action) and one which works well.



The unusually small sprite adds fun to the gameplay and allows more of the play area to be seen

You play Ben Bright, the hero of the title, who is on a mission to rescue the Merry Men. It's your job to make your way across the platforms, avoiding obstacles, leaping across gaps and climbing up ledges. And as well as taxing your arcade skills, you get to exercise the old brain too with the problem solving element. You find the chaps, unlock them from their cells, find a safe route for them and return them back to the teleporter. These elements work exceptionally well and makes Benefactor highly addictive.

Although this version is a direct port-over from the A1200, it is still a recommended purchase for CD32 gamers. Graphics are imaginative and varied, the main character is well animated and, with his small size, is perfectly suited to the gameplay. Sound effects add to the action too.

An original title that will keep you entertained for ages.

80%

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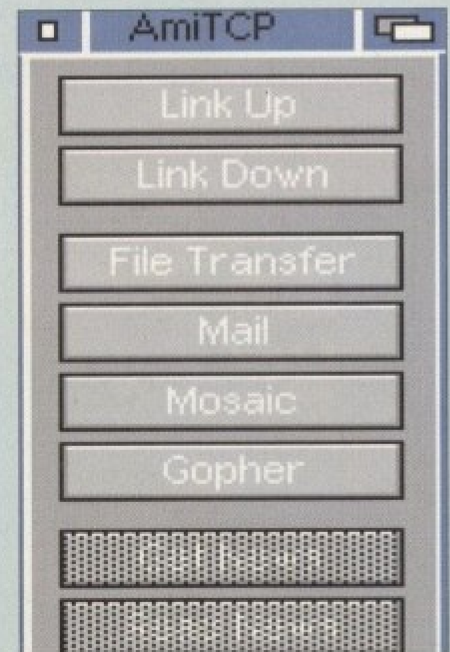


Driving with

This month I'm going to talk to you about drive space. Once upon a time, people considered themselves extremely lucky to have 20Mb of space available to them on a hard drive. "I'll never be able to fill this up" they cried. But they had reckoned without the advent of 'bloatware.'

'Bloatware' soaks up all available drive space leaving you with the bare minimum of room in which to save your own files. After all, what is more important? Your machine looking good and offering you features you'd never dreamed you'd need, or doing what it ought to and having plenty of space left for further expansion.

There is an unwritten rule in computing which says that if you are buying a hard drive, think of the largest size you will ever probably need and double it. To be on the safe side you might consider tripling it. It's a simple fact of economics: Two 105Mb hard drives cost more than one 210Mb hard drive, says he as he straps on another gig.



An excellent little utility from a near genious. But alas even this little requires almost 200k of Cando library to kick in

Now, I'll be the first to admit, I love having a number puzzle feature in my word processor, I really like the fact that my icons could have a file size larger than most of the programs in my C: directory, and I adore the fact that the spelling checker I am using for this document has a massive four zillion word index.

However, I'll also be the first to admit that I miss not being able to put anything else onto my groaning hard drive that just tells me to 'Go away, I'm stuffed.' This is not really an Amiga problem. No, for the real culprits we have to look across the processor sea to those IBM compatible machines, where an installation of 15Mb is not uncommon for a game, let alone a word processor. Simply installing the integrated package Microsoft Office Professional will steal a massive 120Mb of hard drive space.

SPACE SAVING

All we're talking about here is a copy of Wordworth/Final Writer, Superbase Professional and ProCalc, together with Scala. What's that on the Amiga, umm, I make it about 14Mb max. But there is still space to be saved. If you went and only bought a piddly little drive (anything lower than 105Mb is really not worth considering these days), you are going to have to bite the bullet and get rid of some stuff.

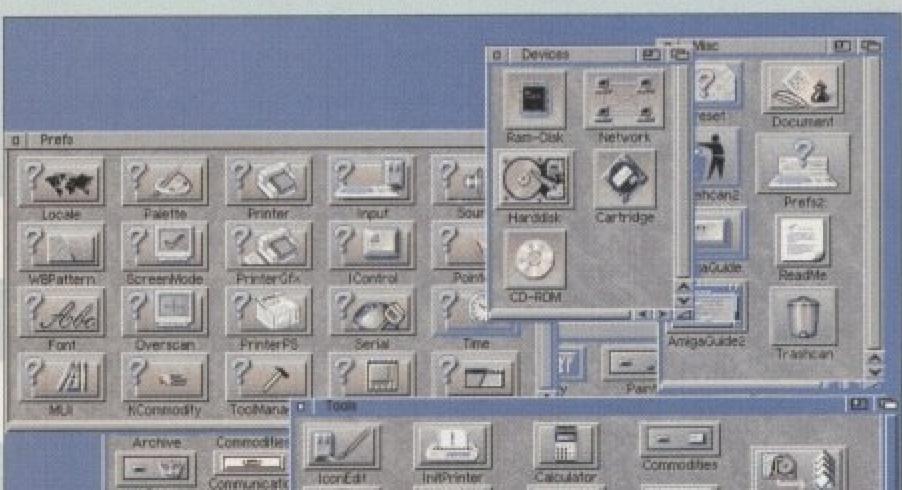
Get rid of Magic Workbench. I know it looks great, but the more you use your machine the more space it takes up. A standard icon is usually less than 1k; a Magic Workbench version can be as much as 4k. If you are using a word processor with a big dictionary and thesaurus, dump 'em and go and buy yourself paper versions. I know it's not as convenient, but we're probably talking about roughly a megabyte of space here, and every meg counts.

Fonts are another good example of creeping Bloatitis. Everyone always starts

Acronym alert

Here's the first section of a smattering of acronyms and their definitions – part 1: A-F

AGA: Advanced Graphics Architecture. Commodore's current graphics standard, responsible for modes like DoublePAL and HAM8.
ASCII: American Standard Code for Information Interchange. A standard that allows text to be exchanged between computers.
BASIC: Beginners All-purpose Symbolic Instruction Code.
CIA: Complex Interface Adaptor. There are two of these in every Amiga and between them they look after things like the Parallel and Serial ports, mouse ports and floppy drives.
CISC: Complex Instruction Set Computing. Compare RISC and VLIW.
CLI: Command Line Interface. The Amiga's Shell window is a CLI and a PC running DOS without Windows only has a CLI.
CMD: Change Main Device. An Amiga program that allows the user to redirect output to a printer, for example, and send the information elsewhere.
CPU: Central Processing Unit. The 68000, 68020, 68030 or 68040 chip that powers your Amiga.
DCFS: Directory Caching Filing System. Only available on machines running Kickstart 3 or higher, DCFS speeds up floppy disk access significantly. See also FFS and OFS.
DPI: Dots Per Inch. One of the measurements by which printer and scanner performance is gauged, the higher the DPI the better the print or scan quality.
ECS: Enhanced Chip Set. This slightly upgraded chipset available in A500+, A600 and A3000 computers offered a maximum of 2Mb Chip RAM and gave two new screen modes; Productivity and Super Hi-Res.
EPS: Encapsulated PostScript. A format for storing structured clip art and documents.
FAQ: Netspeak for Frequently Asked Questions. A text file usually given the name "subject.FAQ" where subject is any topic you care to mention from Bonsai tree growing to Zymology (brewing to you and me).
FFS: FastFileSystem. The file system introduced in Kickstart 1.3 for hard drives and in Kickstart 2.0 for floppy drives. It was a great improvement over OFS (qv.). See also DCFS and OFS.
FPU: Floating Point Unit. The maths co-processor in some Amigas (68881 or 68882).
FTP: File Transfer Protocol. How people upload and download to and from the Internet.



The familiar face of Magic Workbench. However on a limited system the storage and Ram overheads may be just a little too much to bare...

Hidden meanings

Commodore's X-file. Hidden within the structure of AmigDOS there are deep, dark secrets obviously placed there for the benefit of aliens. These messages started in the very first versions of the operating system, but exist to this day. If you want to find them, you will have to undergo physical torture that might be unendurable. Don't say I didn't warn you.

Workbench 1.2 and 1.3 – for the secret messages to appear on these old and outdated machines you will need to:

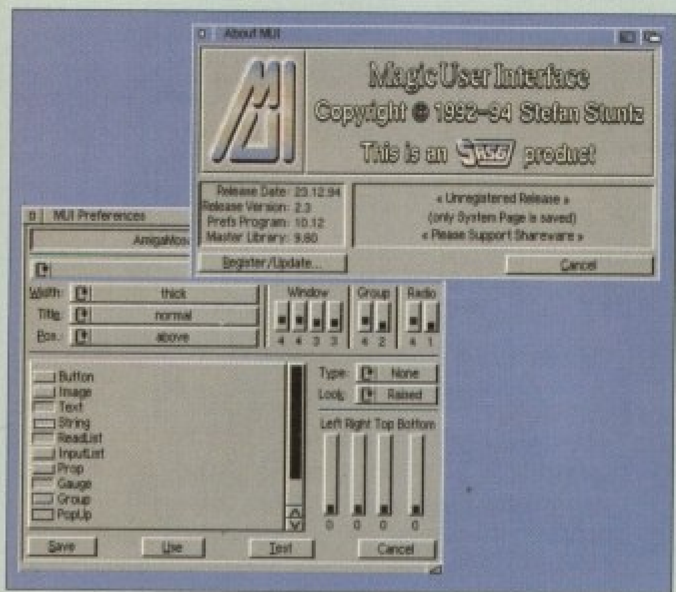
- Hold down both sets of Alt and Shift keys
- Press each of the function keys in turn and you will see the messages. As with all these secret messages, having a third arm is practically essential.
- You can also try ejecting and reinserting a disk in DF0: for further information (while holding down the keys).

Workbench 2.x
Further secrets are revealed in this version of Commodore's operating system:

- Make sure Workbench is active

...h caution

Frank Nord delves into his medical bag this month and comes up with a prescription of good health

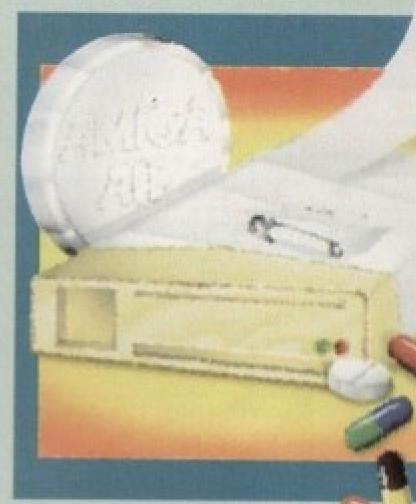


Another example of pretty pictures at a price. MUI may be pretty but does your system really handle the designer looks



A copy of a decent directory manager is an absolute must for anyone who's serious about their machine

Amiga Medical Part 3



with the standard Workbench fonts, but then you think you're big and start bunging fonts on your hard drive like there's no tomorrow. Well, stop it, it'll do you no good. The larger your FONTS: directory, the longer you'll have to wait each time it needs to be read. Put fancy fonts on floppy and use them that way, rather than clogging your drive's tracks with SukiBapswingBold or HarvinTeuportItalic.

MOVING FILES

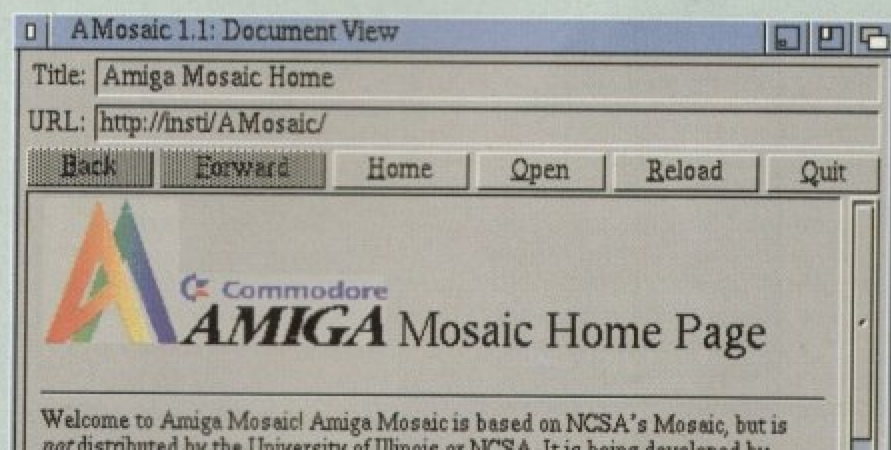
Your own files are not sacrosanct in this pruning operation either. Old files should be LHA'ed or, preferably, moved off your machine onto floppy disk. Even files you still use, but only rarely, should be subjected to this process. Anything you don't use more than once a week is fodder for floppies.

Workbench files like Clock and MeMacs can be dumped by most of the Amiga-using population. PrepCard. Have you got an A600 or 1200? No? Well, it's of no use to you, matey, get rid of it. Be ruthless, you'll soon see your hard drive shedding those megabytes. A happy hard drive is one that is no more than 80 per cent full.

This is not a job you can do once and forget about. Just like a garden, you need to keep cutting back the weeds and pruning your rose bushes. If you haven't tidied up your machine for a while, a good way of finding dross is to use Virus Checker to sift through all the directories on your hard drive looking for viruses.

That's not what you'll be doing – you'll actually be looking at the Virus Checker display saying: "I thought I got rid of that... I don't need that, I've got a new version... etc. You can do the same thing with DOpus or Diskmaster. Pay close attention to your libraries drawer. God knows the number of unnecessary libraries I have floating around in there, and these don't just harm your hard drive space balance, they can harm your memory too. Get rid of ones you are sure you don't need and mark all new entries in this directory so that you know which programs they belong to. If you've got rid of the program then get rid of the library that goes with it. I'm sorry if all this sounds a little harsh, but hey, it's a war out there.

Well, that's about it for this month. Next month I will be discussing how to control your Amiga with a PD program called AlphaControl which uses the electromagnetic pulses in your brain to move the mouse pointer on screen!!



Amiga Mosaic in action. Mosaic is the front-end for the World Wide Web. See WWW and HTML

- Hold down the CTRL key and both sets of Alt and Shift keys
- Use the mouse (don't let go of those keys yet!), and choose a menu item from Workbench's menus
- Finally, release the keys and choose "Last message..." from the Workbench project menu.

Workbench 3.x

The FBI (Frank's Bureau of Investigation) has just been informed that our intruders have not yet been caught and have managed to infiltrate another corrupting message into the Amiga's fine, upstanding operating system:

- Make sure that no more than 16 tasks are running when Workbench is booted. The easiest way to ensure this is to rename WBstartup. Reboot.\
- Press and hold the right mouse button
- Keeping the right mouse button held down, press and hold down the CTRL and both sets of Alt and Shift keys
- Select 'About...' in Workbench's Project menu
- Move the resultant window to one side (do not close this window) and start again by pressing the right mouse button. Within about 15 tries or so a new, insidious About box should appear

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Amiga 3D Part 2

A stick in time

Paul Austin renders a few more opinions on 3D design essentials

As promised in last month's column, I'll be concentrating on various time-saving techniques, tricks of the trade and how to share models between various packages

For most 3D enthusiasts, time saving is something of a preoccupation. However, it's amazing how many people overlook the simple things, a classic example being hotkeys. All the major 3D systems offer extensive hotkey support, and once memorised these insignificant little key combinations can make a real difference during the design of both objects and scenes.

At first glance the prospect of memorising hundreds of hotkeys may seem a little daunting. However, the situation isn't quite as bad as you may think.

Firstly, most packages share the same functions on the same key combinations. For example, cut and paste are invariably Amiga/c, and Amiga/v. Secondly there's a fool proof way of mastering all your favourites. The trick is simple enough. Every time you need a particular feature go to the pull-down, highlight the feature you need and take a look at the hotkey equivalent.

Now cancel the selection and use the hotkey command you've just seen. Do this once or twice and I'll guarantee you'll soon be able to recall every hotkey and forget pull-downs and button selections for good.

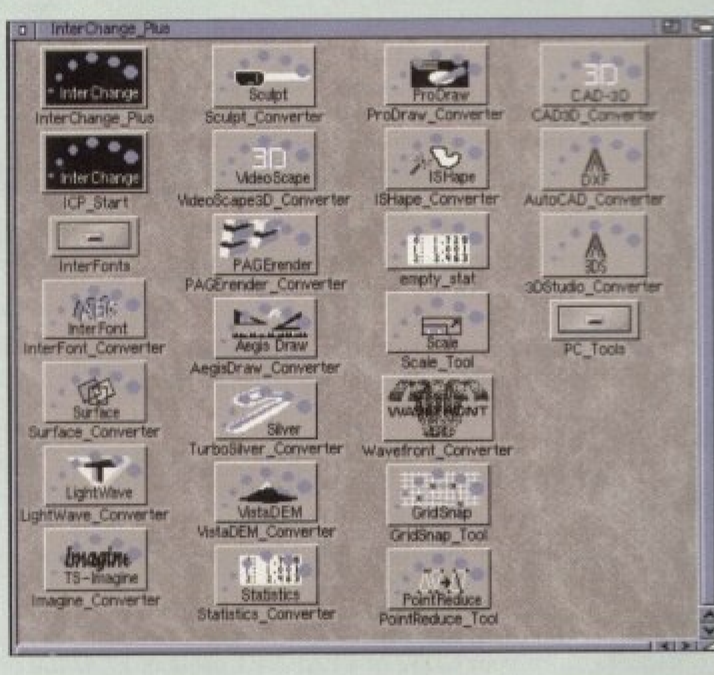
It's often well worth taking at close look at the manual or any on-line help as many hotkeys aren't necessarily listed within the interface. And of course, some programs even allow you to define your own hotkeys and on-screen buttons – Imagine being a prime example.

Another common time saving mistake is to overlook one of the cornerstones of 3D modelling, namely symmetry. During the ubiquitous modelling tutorials at the heart of most 3D manuals, you're often left with the impression that symmetry or mirroring is handy for duplicating table legs, and that's about all.

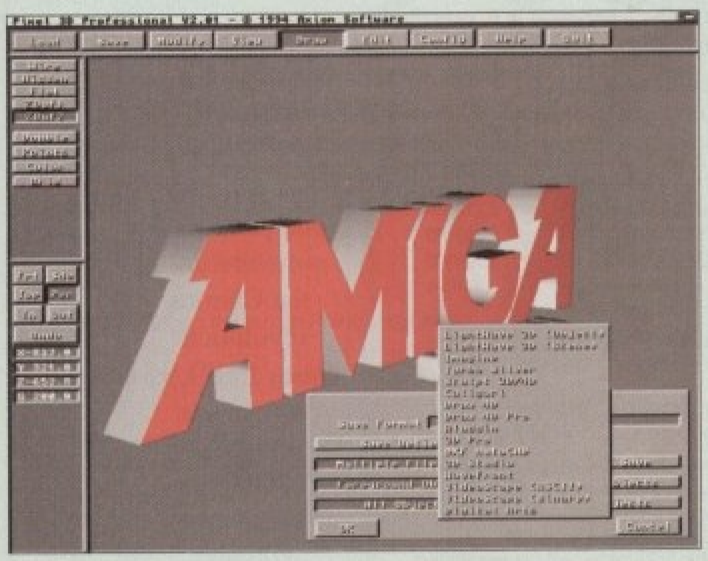
In reality, the ability to mirror something can save literally hours of hard graft, a classic example being a human head. Almost everybody attempts a head at one time or another – usually with little success.

However, if you start by modelling just half a head and mirror the end results your chances of success will improve dramatically – especially if you're using tools which can produce erratic or unpredictable results from one application to the next, magnets being a good example.

With the growing band of 3D systems on the market, sharing models is becoming ever more important. If, like me, you spent your formative years using Sculpt, Imagine and Real3D, the prospect of throwing all that hard work away and starting afresh on an object library in Lightwave isn't very appealing.



Perhaps not the best looking interface in the business, but nevertheless an essential investment for anyone who simply needs to convert multiple objects with minimum effort



Although perhaps not quite as reliable for basic conversion, Pixel Pro V2 does offer an impressive collection of 3D whistles and bells – EPS conversion being one of the most important

CHOICES

The solution comes in the form of InterChange Plus and the new Pixel Pro v2. In an ideal world you'd have a copy of both, but in reality the choice boils down to whether you require the unrivalled conversion skill and format variety of IP or the added extras and superior interface and control of PPv2.

In my experience, straightforward conversion from one format to the next is best achieved using IP – however, PPv2 does offer the unique option of full PostScript font support, as well as 3D conversion for EPS files, alias Encapsulated PostScript.

If you take a quick glance around Amiga Computing you'll come across hundreds of EPS files in the form of logotypes such as ESP, ACAS, System Essentials, Public Sector and so on. It doesn't take a genius to imagine how important it could be to any 3D designer to have near instant access to three dimensional replications of a client's corporate ID or marketing material.

However, regardless of the conversion program you choose, you could well come across a common problem which often occurs when converting an object from a double to a single-sided rendering platform.

After conversion it may often appear that every other polygon in a model is missing. This is because one of the two polygon pairs is removed, which if then viewed from the wrong side gives the impression of a hole.

This particular problem is most common within Lightwave – fortunately the solution is simple. First align all polygons. This will either be an instant cure, or alternatively the model will disappear entirely. If so, don't panic. Simply flip all polygons and with any luck you're latest import will be perfect.

Lastly, always keep an open mind when looking for or exchanging models. Most of the major 3D systems offer limited support for other formats at least, with DXF files being supported by Lightwave, Imagine and Real3D plus a host of PC programs. As a result you can sometimes share resources without investing in conversion software.

Getting into print

A common 3D problem is how to free your creations from the confines of the machine. An obvious answer is video tape, but what if your creations aren't animated? The answer is, of course, hard copy. Unfortunately, with very few exceptions, simply printing your creations won't do them justice.

The only real answer is to produce a transparency and then use this to generate glossy photographic prints. In order to do this you'll need to contact a print bureau who can handle 24-bit files. The only limitation with this is that many may require non-standard Amiga formats such as TIF, Targa or Jpeg. Secondly, they will usually want the file on a PC disk and in the correct aspect ratio.

By default most Amiga programs generate video friendly oblong pixels, however for printing purposes square pixels are essential. Therefore, ensure your software is set to render in an aspect of 1:1.

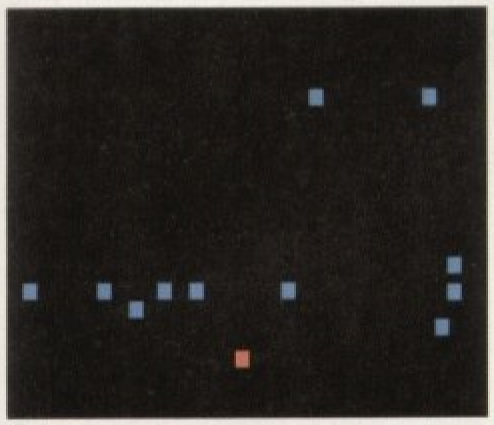
It's often worth enquiring about the best resolution for rendering the transparencies you require. The usual choice for a 35ml is 2 x 3. Finally, always render to at least 1024 in the longest axis – otherwise the final prints may lack the necessary detail.

Robot attack

After all the Easy AMOS tutorials, Phil South looks into a nice routine which can form the basis of a Robotron clone



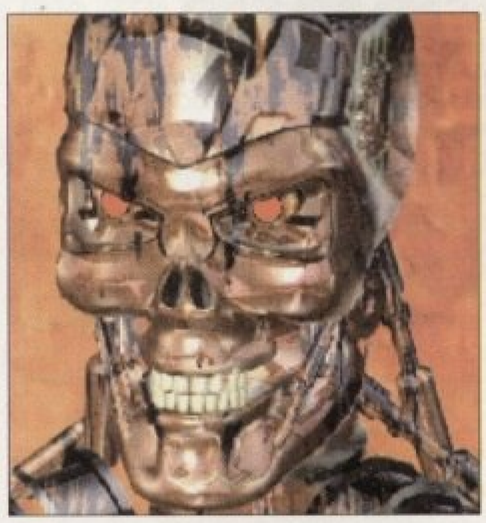
I get sent a lot of disks from people with examples of finished games using sprites and bobs, sounds, MOD files etc., and lovely though they are, they are not really what I'd call printable. I can't print the sprites and bobs, but I can put them on the cover disks if I have time before the magazine goes to press, but this often isn't the case. I prefer routines using a bit of Amos code which does something clever so you can use it in your own games to improve what you are doing.



These blocks may not look like sprites, but they can still catch you

This routine from Tom Kane in Scotland is an example of what I'm talking about. In his letter Tom says that this is a work in progress, but I like this routine because it is short, clever and could make the basis of a really good game.

The gist of it is this: you move the player sprite around and the other sprites on the screen track your movement and follow you around until they catch you. This is just a demo of the attack movements, so the sprites are simple blocks and nothing happens when they catch you, except the boom noise goes off. All the same it is a good routine and easy to adapt into something very playable.



You too can have friendly robots in your games

Robots on the Starboard Bow...

The first bits of the program are to grab the Bobs needed:

```
Cls 4,0,0 To 22,22
Get Bob 1,0,0 To 8,8
Cls 6,0,0 To 22,22
Get Bob 2,0,0 To 8,8
Cls 5,0,0 To 22,22
Get Bob 3,0,0 To 5,5
```

Tom has used CLS to create coloured areas on the screen, but obviously BAR would make them just as easily. Next we set up an array to store X and Y positions:

```
S=12 : Dim X(S),Y(S),XX(TY)
```

So now we set up the screen in the usual way:

```
Paper 0 : Pen 4 : Hide : Flash Off : Cls 0
```

and then we can set up the X and Y variables for the centre of the screen, which will be the starting point of our character:

```
X=160 : Y=100
```

Then we double buffer the screen, as this allows for nice smooth sprite scrolling:

```
Double Buffer
```

Now the meaty bits. First we use a For/Next loop to randomly place the robots on the screen:

```
For TY=1 To S
X(TY)=Rnd(1)*Rnd(320)
Y(TY)=Rnd(1)*Rnd(200)
Next
```

Having done that we turn off Bob Update so that we can do it manually in the following Repeat/Until loop:

```
Bob Update Off
```

and then we set our LIFE variable to the amount of lives we want to have:

```
LIFE=5
```

Incidentally, it would have been better to put the variables at the beginning of the program, but we'll let it be for the time being.

Now we have the main loop. Inside it are a number of other nested loops, and this is a good program. Why? Of course you are right – it uses no PROCs. The first section of the loop does a bob update, and waits for the next vertical blank to move the bobs:

```
Repeat
Bob Update
Wait Vbl
```

The character bob is moved now, and any joystick moves are detected:

```
Bob S+1,X,Y,1
Add X,XX
Add Y,YY
X=Max(5,Min(310,X))
Y=Max(5,Min(185,Y))
Z=Jleft(1)-Jright(1)
If Z Then Add XX,Sgn(Z)
Z2=Jup(1)-Jdown(1)
If Z2 Then Add YY,Sgn(Z2)
XX=Max(-2,Min(2,XX))
YY=Max(-2,Min(2,YY))
Add T,1,0 To 1
```

Then we do another for/next to shift the robots:

```
For TY=1 To S
Bob TY,X(TY),Y(TY),2
Add X(TY),Sgn(X-X(TY))
Add Y(TY),Sgn(Y-Y(TY))
Z2=Bob Col(TY,S+1 To S+1)
```

and if you are caught by a robot, your life is decremented by 1:

```
If Z2
Dec LIFE : Boom
```

and the robots are redistributed for another pass:

```
R=Rnd(1)
If R=1
R2=Rnd(1)
X(TY)=Rnd(320)
Y(TY)=0+R2*200
Else
R2=Rnd(1)
Y(TY)=Rnd(200)
X(TY)=0+R2*320
```

and to tie up all the loops, you add all the End Ifs and Nexts, plus one final Until to close the main loop.

```
End If
End If
Next
Until LIFE>-111
```

The clever bit is when the program checks where you are and sends the robots towards you, and when you start using the program yourself you'll see quite easily how this works.

The routine will need tweaking a little bit for speed, for example each level could have different speeds of robots. Then again you've got enough to contend with producing an Amos version of that lovely layered explosion effect in Robotron.

Either way, the problems with the routine are easily fixed: make sure that the robots can't occupy the same space by using collision detection. Make them slower. Construct a routine which fires the bullets in the direction you are facing, in the style of Robotron.

Incidentally, if you are an Easy AMOS user, the Joystick commands will not work. You have to convert the joystick routines as follows:

```
Jleft becomes Joy(1)=4
Jup becomes Joy(1)=1
Jright becomes Joy(1)=8
Jdown becomes Joy(1)=2
```

using the syntax:

```
If Joy(1)=4 Then WHATEVER
```

It's the same but it takes a bit more work to operate it. All the details are in your manual.

Write stuff

If you have an Amos question, or a routine you'd like to share with the world, then please write to Phil South, AMOS Column, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP.

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Character assassination



Paul Overaa outlines the neat, tidy way to embed control sequences into your ARexx programs

Most standalone ARexx programs have to do various I/O (input-output) operations and you'll find an occasional need to transmit a series of control characters in order to produce a certain effect. You might, for example, want to show the title of a menu page in inverse video text, or highlight a selected menu item from options being displayed at a console window.

The characters and numbers used to perform these sort of display switching tricks are collectively known as 'control sequences' and the one thing they all have in common is that the characters themselves usually imply little or nothing about the operation being performed.

You can, for example, clear a console window's display by writing the values 1b hex and 63 hex to it like this:

```
call Writeln(1, '1b'x||'63'x)
```

The bad news then is that while these sort of weirdo functions can produce the right effect, their purpose is never obvious. In fact, when you look back at the code a few years later the chances are high that you won't even remember what those magic numbers buried in your code actually mean.

The solution, of course, is to isolate the control code values in a way that makes them more understandable – this just means giving control sequences understandable names. Now, unlike the C language, ARexx doesn't support the use of predefined constants, so any definitions have to be set up using ARexx variables.

Luckily, it's quite easy to create things that 'look' like C constant definitions and the convention I adopt involves using uppercase variable names. Console device sequences, for example, usually start with a special Control Sequence Introducer (CSI) or an Escape character, so I would define these in this fashion:

```
CSI    =        '9b'x
ESC    =        '1b'x
```

Similarly a linefeed definition (which ASCII defines as decimal 10, i.e. 0A hex), would be produced using:

```
LF     =        '0A'x
```

From these types of building blocks more complex strings can be created. A reset definition for clearing a console window could be created using:

```
CLEAR_WINDOW=ESC||'63'x          /* clear console window */
```

and this means that the Writeln(1, '1b'xII'63'x) function call mentioned earlier could then be written using the easier-to-read statement:

```
call Writeln(1, CLEAR_WINDOW)
```

It should be fairly clear that the purpose of this sort of line in a program will remain obvious even years after the code was written, because we've turned the control sequence characters into a definition that is essentially self-documenting. Similar control definitions can be used for other console functions. Here, for example, are three commands which respectively set inverse video, italic display and plain text console displays:

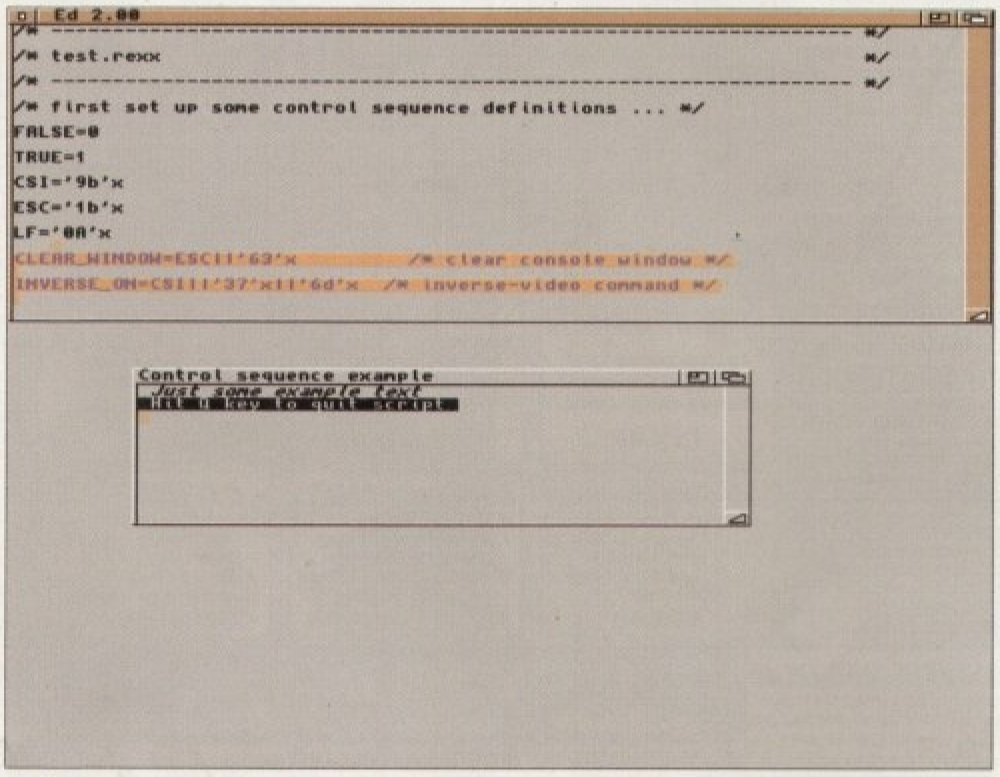
```
INVERSE_ON=CSI||'37'x||'6d'x      /* inverse-video command */
ITALIC_ON=CSI||'33'x||'6d'x       /* italic command */
PLAIN_TEXT=CSI||'30'x||'6d'x      /* plain text command */
```

With definitions like these in place it becomes extremely easy to create variables that, while containing all the necessary control sequence data, are still easy to read and understand. In the example program I've created strings that get displayed using italics and inverse video like this:

```
EXAMPLE_TEXT1=ITALIC_ON 'Just some example text' PLAIN_TEXT
EXAMPLE_TEXT2=INVERSE_ON 'Hit Q key to quit script' PLAIN_TEXT
```

These types of approaches are used by many programmers in many languages and aren't tricks as such, just good coding style. The best place for all such definitions is near the start of a program. This makes it easy to locate them should they ever need to be changed.

The really important benefit about using these types of symbolic definitions, however, is that you eliminate all the cluttering caused by awkward control sequences and this means your code becomes much easier to write, understand and maintain.



It's easy to add things like italic and inverse video effects to a console display without cluttering the code with control data!

```
First set up some control sequence definitions:
FALSE=0
TRUE=1
CSI='9b'x
ESC='1b'x
LF='0A'x

CLEAR_WINDOW=ESC||'63'x
clear console window
INVERSE_ON=CSI||'37'x||'6d'x
inverse-video command
ITALIC_ON=CSI||'33'x||'6d'x
italic command
PLAIN_TEXT=CSI||'30'x||'6d'x
plain text command

EXAMPLE_TEXT1=ITALIC_ON 'Just some example text'
PLAIN_TEXT LF
EXAMPLE_TEXT2=INVERSE_ON 'Hit Q key to quit
script' PLAIN_TEXT LF

call Open(1,'RAW:0/0/640/200/Control sequence
example')
g_exit_flag=FALSE
do until g_exit_flag
        call DisplayText()
        user_input=Upper(Readch(1,1))
        if user_input='Q' then
g_exit_flag=TRUE

end
call Close(1)
exit

DisplayText:
call Writech(1,CLEAR_WINDOW)
call Writech(1,EXAMPLE_TEXT1)
call Writech(1,EXAMPLE_TEXT2)
return
```

A short example that shows some control sequences in action

True but strange

Weirdoes, freaks and crazy people. Yes, the *Amiga Computing* office is a strange place, but not as strange as the Internet. Phil South investigates

The odd thing about the Internet is that anybody can join, it's not an exclusive club, in fact you don't even have to be sane. The thing is that with such a diverse range of people all over the Net it's hard to swing a virtual cat without knocking over someone with a bizarre point of view.

Obviously if you like bizarre points of view, like me, this is a positive boon. There are odd sites on the Net which cater for every taste, or even people with no taste, and the stuff you can download is positively mind blowing. For a start you wonder if this stuff is legal, which in some cases is a little dubious. But having established that most of it actually is legal, you marvel at the diversity and the extraordinary oddness of Net inhabitants.

To start this journey into the bizarre, try downloading some images from the SCHWA books and T-shirts. SCHWA is the brainchild of artist Bill Barker, and his merchandise emblazoned with the SCHWA logos and alien heads are deeply cool at the moment.

SCHWA is a world of alien invasion, where tiny stick people are at the mercy of the alien invaders. It's a great book, and you can get it and all the other SCHWA gear through Fortean Times in the UK. To get some images from the book use anonymous FTP to: ftp.unr.edu, and look in the directory /pub/images/SCHWA.

BRAIN WAVE

Another group who specialise in odd merchandise are the Fringeware crew, hailing from Austin, Texas. (No relation to Austin, Paul - ed) They have a great catalogue of crazy stuff, including brain machines, brain wave analyser software (only $1500, a snip), home control interfaces, and T-shirts and other strange goodies.

Sadly they don't take credit card orders – or at least they didn't the last time I bought something from them – so ordering things over the Net is problematic. Reach them anyway at: fringeware@io.com or using a web browser to: http://io.com/commercial/fringeware/home.html.

Someone you CAN buy stuff from is Rocket Science Games, who sell their tremendous baseball caps, T-shirts and mugs (a Pyrex graduated beaker with a handle), plus head-mounted water squirters. They sell their games too, but they are all for consoles or the PC (spit) so you won't be interested in those.



The X-Files – not just a TV show

Fans of X-Files, which I guess includes all of us, will be pleased to find the sections on Delphi (in the 20th Century Fox section) and the Internet, at: mtp034.mis.semi.harris.com. Here you can FTP pictures and text all about the show, including the show guide which details all the plots and who wrote what.

There are also some AVI files for playback on a PC, although no Mpeg files – which would be more use to us, but there you go. The pictures make great workbench backgrounds, and I have one myself. But then I'm a bit sad.

Weird stuff isn't hard to find, you simply have to know where to look, or where to ask. The Usenet newsgroup alt.tasteless is one of the best sources of information on the world of the strange. It contains material which may be shocking to some viewers, but hell, that serves them right for looking in there, dunnit?

Tasteless jokes, tasteless gifts, tasteless information. So tasteless in fact I can't give you an example here or I'll end up in jail. Oh apart from the one about the woman who took a tomato and... (snip!)

Another cool way to find weird stuff is by using a search engine, like Webcrawler (http://webcrawler.cs.washington.edu/WebCrawler/WebQuery.html) or Yahoo (http://akebono.stanford.edu/yahoo), Veronica, Archie, whatever... and typing in something weird, like 'UFO', 'weirdness', or 'paranormal.' Then you'll get a list of appropriate sites to 'surf' to – God I hate that expression.

In fact the 'UFO' conference on CIX is a good source of starting points, as is Usenet newsgroup alt.alien.visitors. You could also try the following:

alt.bigfoot
alt.elvis.sighting
alt.mindcontrol
alt.paranet.abduct
alt.paranet.forteana
alt.paranet.ufo

and of course the best title for a newsgroup I've ever seen:

alt.binaries.sounds-armpit.noises

which, even if it's empty most of the time, is still a great piece of Net-based concept art.

And finally, for you fetishists out there, how about the http address for muscle women? Yes, body building babes. Find them at: http://www.ama.caltech.edu/~mrm/body.html. All we need now is the Mpeg video of bodybuilding babes in bikinis shooting automatic weapons and we'll be in business.

If you have any strange sites you'd like me to explore then e-mail me and let me know. I'm a big fan of this kind of Net activity and am hungry for more, so any contributions will be gratefully received. And by the way before you go, have you noticed that weird is an anagram of wired? Spooky, eh?



Find out about the plots and solve the crime – maybe even before Scully and Mulder...

BBSWatch

If you have a BBS you'd like to publicise then e-mail me and tell me about it. Here's this month's sysop:

"I'm writing to tell you about my BBS, which I am sure readers of Amiga Computing would benefit from using. It's called GateWAY BBS and is located in Grays, Essex. Within the next month the total number of mail echoes will reach around 1000, and we have files for the Amiga, PC, Apple Mac and Atari.

There are several on-line games like Global War, and we also support pointing on any of the ten mail networks we are in, including FidoNet and the Internet. The BBS is run on an Amiga and has many users, even though we have only been on-line for a short time. It's open 24-hours a day and can be reached on 01375 393816. You can download from the first call, and to help the users there are separate daytime voice and fax support lines. I can be reached at 2:257/99@fidonet.org"

Contact point

If you'd like to talk comms then why not e-mail me on: snouty@cix.compulink.co.uk



What's your resolution?



Forget all those promises you made at New Year, Gary Whiteley wants to talk about Amiga screen resolutions and how they relate to DTV

The trouble with screen resolutions on the Amiga nowadays is that there are so many to choose from! Not that this is a bad thing of course, because choice brings with it more possibilities though inevitably it can also bring more confusion.

In the pre-AA chip set days life was simpler, but even then there was a choice to be made between Low resolution (e.g. 320 x 256 pixels) and Interlaced Lo-res (e.g. 320 x 512) in up to 4096 colours, and Medium-res (e.g. 640 x 256) and Hi-res (e.g. 640 x 512) in up to 16 colours each. Include the possibility of producing each of these resolutions in overscan so that they fully cover a TV screen and you've got even more choice.

The trouble is that because of the wide range of Amigas and the amount of memory and display cards they may be fitted with, it's very difficult to write about screen resolutions in a way which every Amiga owner will be able to relate to. For instance, it's easy enough for me to work in 24-bit at 768 x 580 pixels full PAL overscan because of the extras I've added to my Amiga over the years, but this would be impossible for the owner of any original spec Amiga.

POSSIBILITIES

The advent of the AA chips added two more possibilities – HAM8 and 256 colour modes, as well as the various multiscan and other modes. Now, as far as video work goes, you can forget about everything but the Amiga's standard 15.6kHz RGB or other video output (if available), because this is ultimately what goes – via a genlock, modulator or other video coder in the case of RGB – to either TV or videotape.

A multisync display might look great, but anything above 15.6kHz won't be accessible to your video equipment, so it's important you work in one of the 'regular' Amiga PAL screen modes when preparing work destined for video recording.

Naturally there are exceptions to this rule. For instance, you could use a 3D program on a multisync display to get a stable modelling and animation display, but you'll still have to output the images at a frequency the video can understand.



Another resolution comparison, generated in Lightwave, to demonstrate both resolution and anti-aliasing. Anti-clockwise in quarters from top left: Lo-res, Lo-res with anti-aliasing, Hi-res with anti-aliasing, Hi-res

See how quickly I've got bogged down in terminology – screen modes, PAL, pixels, multisync, resolutions and frequencies? No wonder Amiga DTV can be confusing with all this ambiguous jargon to wade through!

Now we've got frequency out of the way, what about those screen sizes (or resolutions)? My general rule is that you should work in the highest resolution available to you, and with the least number of colours necessary to get the job done. So a simple title might require four colours at a resolution of 768 x 580. Just because your Amiga can handle 4096, 262,000 or even 16 million different colours on screen doesn't mean that you must always use them.

The more colours you use the more memory is required, and if you're working at high resolution then it's easy to run out of memory quickly on less-endowed Amigas. If you're animating then using less colours may well provide more playback speed, so it's often best to try to work within a set palette size whenever possible. As usual, some forethought and planning will come in handy, especially where logos or graphics with particular colour schemes are required.

Why am I so keen to advocate higher resolutions and less colours? Well, I'm not really, it's just a personal preference of mine. There are times when a low resolution effect is just right, but in general I prefer graphics which don't have jagged edges, which are as smooth as I can make them. In fact, I used to spend a lot of time carefully working over static title images of mine and hand-placing intermediate colours to produce an 'anti-aliasing' effect to smooth out the jaggies even further.

In the accompanying illustrations I've provided a number of screen grabs from different screen resolutions under different conditions to show their effects on the jaggedness of the graphics. With Amiga video it's very much a case of what you see is what you get, and if you want good-looking graphics then you've got to make them look good yourself.

Apart from suffering less jaggies, one advantage of using high resolution interlaced screens for video titling is that smaller letters look much better than they would on lo-res screens – and you can also fit more readable text onto a single screen, should you need to. Hi-res interlaced screens look better because they have twice the number of horizontal lines than a non-interlaced image, and hence more pixels are available to smooth out potential rough areas.



Note how much more jagged the lo-res letter A is compared to the Hi-res letter V

Interlacing

There is sometimes confusion about whether or not it is obligatory to use interlaced Amiga screens for video, since video itself is interlaced, but my answer would be to use whatever screen resolution you think fit, interlaced or not.

Most modern Amiga genlocks are quite happy with any kind of Amiga RGB output – so long as it is at 15.6kHz PAL! – so if you want to use jagged lo-res graphics, then be my guest.

Forthcoming attractions

Next month – overscan and anti-aliasing.

Gary Whiteley can be e-mailed as drgaz@cix.compulink.co.uk. He also has a book on Amiga DTV available – 'Amiga Desktop Video.'

Demo of delights

MUSIC

This month our resident music expert Paul Overaa takes the lid off a rather interesting can of worms involving Midi sequencing, tracker modules and Amiga sounds

The other day I got a telephone call from someone who obviously reads this column regularly. While we were chatting he happened to mention that he was a bit surprised, since I write Amiga Computing's music column, that I never put any of my own tracker module arrangements on the Cover Disk. Cheek, I thought – what he really meant was that he was wondering whether in reality I was tone deaf!

After I had put the phone down, however, it dawned on me that he had a valid point, so this month I thought I'd better at least knock up some sort of Amiga internal sounds demo tune for you to listen to. The demo does in fact relate to some experiments I've been carrying out recently, so I'll start by filling you in on these.

Those of you who follow my monthly wanderings through the music world may get the impression that I'm not a particularly great fan of Amiga 8-bit sampled sounds. It's certainly true that for professional music use, 8-bit sampled sounds just aren't good enough.

Few musicians would argue with that and when you start trying to use conventional Amiga sounds alongside the normal synthesizers and expanders, it takes only minutes to realise that the Amiga's existing sound facilities leave much to be desired. Nevertheless, I'll be the first to admit that 8-bit IFF 8SVX sounds are perfectly OK for games and other general Amiga music use.

My real aversion, as far as the 8-bit Amiga sound thing goes, is not the quality of the sounds as such but the effort required to do anything constructive with them. It's not that I'm lazy but, like most writers – whose lives revolve around ever-reducing deadlines – I am usually short of time and find creating songs using conventional Amiga tracker programs a total pain.

KEEPING TRACK

The reason for this is that I'm primarily a Midi user but while it's easy enough to sit down and knock up an arrangement of a tune using a sequencer, turning that piece of music into an Amiga tracker module is quite another matter – so much so that I have now opted for using a totally different method.

The approach I am now using involves songs which actually start life in a conventional sequencer. I create the song with Dr T's KCS sequencer using just Midi channels 1-4 and then store that arrangement as a standard Midi file. The reason for the choice of four channels is because this relates nicely to the Amiga's use of four internal sound channels.

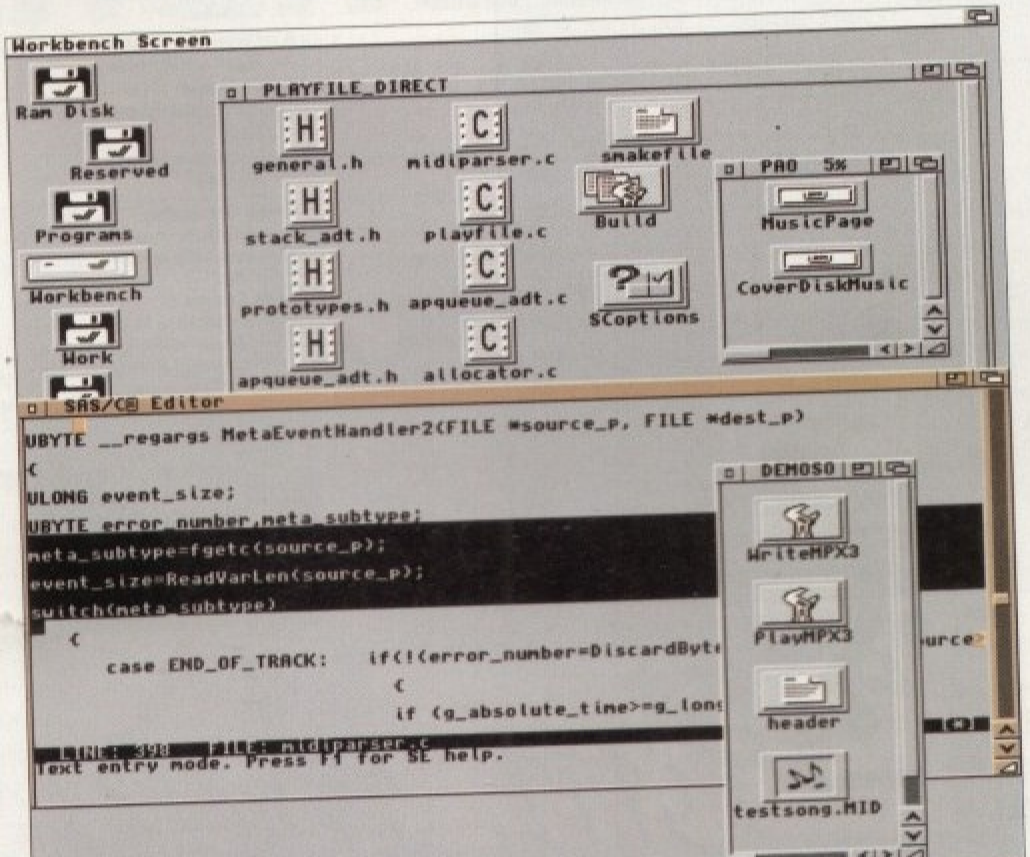
Another current restriction that is relevant is that the note events on any particular track mustn't overlap, otherwise a note playing on one channel would get prematurely cut short the moment the next note on that channel was played. These restrictions are no big deal – they simply mirror the limitations of the Amiga's current sound hardware.

Having got a song stored as a Midi file what happens to it? I've written utilities which convert the Midi message events into a form suitable for the Amiga sound chips. Initially the note-on and note-off Midi events of each track are extracted and merged into a Midi event list that is time ordered. Once that list is available the event times are then modified to represent hardware time delay values that will eventually be jammed into the Amiga's 8520 CIA-B timers.

Hitting the Amiga's timer hardware directly is not, incidentally, really necessary on newer, faster machines because the higher-level timer device facilities have been improved, but the CIA timer technique does seem to be the safest way of getting consistent timing with programs designed to run on old Amigas.

As well as deciding when Midi events should be played, it is also necessary to work out how to produce notes of the right pitch from the samples being used. IFF sound files, as you may know, already contain header information that allow programs to play the sound as it was recorded, but to play a whole range of notes a program needs to recalculate the period values so that the pitch of the sample in question relates to the Midi note that has to be played.

The calculations are not terribly difficult but because it involves some time-intensive floating point number calculations, I prefer to have these values available in advance. The bottom line here is that my programs create files which store timer and audio hardware values alongside the Midi events themselves, the benefit being that no time-consuming calculations need to be done during playback.



Sometimes the only way to get a particular piece of Amiga music software is to write it yourself – and that's just what I've been doing!



But does it work?

Now that I've given you an outline of the boring technical issues, the big questions are, is this approach any good, and more importantly what do the results sound like?

The thing to do at this point is to get your CoverDisk out, find the folder with my example on it, and double-click on the PlayTestSong icon. It's part of the Bagatelle for Piano in A minor and credit goes firstly to Beethoven – who is probably already turning in his grave at my variations – and secondly to Ian Waugh at Words & Music since it was his arrangement of this particular piece that prompted me to produce my own.

Coders among you might also be interested to know that my demo program is using Oregon Research's GameSmith sound library routines for the actual sound generation!

AMIGA COMPUTING ADVERTISERS INDEX

Changing hands

A new voice, a new chapter in DTP. Frank Nord sallies forth on behalf of DTP novices

Welcome, welcome. Yes, 'tis me, here to give you my sage advice on the topic of DTP. This column has been running for about three years under the watchful eye of Ben Pointer, but because I have taken it over I'm going to start from scratch once more, going over some topics that might seem obvious to old hands at the DTP game.

If you are one of those old hands, don't just think there will be nothing of use to you and turn over the page immediately. There's always something to learn, even if it pops up in material you assume yourself to be proficient in. What's more, the different slant given to the topics might cause you to rethink some of your strategies for page layout, thus leading to... well, we'll see.

One of the biggest secrets in DTP is where all those designers get their ideas. Like Penn & Teller, I'm all in favour of the free dissemination of information, so I'll tell you. The answer lies in keeping all those bits of bumpf you are sent through the post, find in magazines, or see as styles in books or on TV. Make a portfolio, not of your own work – that will come later – but of other people's work. This will provide you with a good basis for your future output.

You can pick up a brochure, a magazine and a business card and say, "Hmm, I like the way the text is flowed around the pictures in this brochure, I think the way the page numbers are presented in this mag is good and the font used on this business card is just great. Mix them all together and what have I got?"

If you're not careful, what you've got is a mess. But as you can see, having source material around is very useful as a starting point. And so, as you've probably already worked out, the answer to the above question is that designers steal their ideas. I'm not saying they are all plagiarists and bowdlerisers, but at various points in their careers they all have that magpie urge to collect other people's work and incorporate it into their own designs.

Some of the ideas you might like to emulate, for instance booleaned text where a graphical element runs through the text changing the colour where it hits it (Arrgh! difficult to explain... just see the picture and you'll understand), are very difficult with the software available on the Amiga.

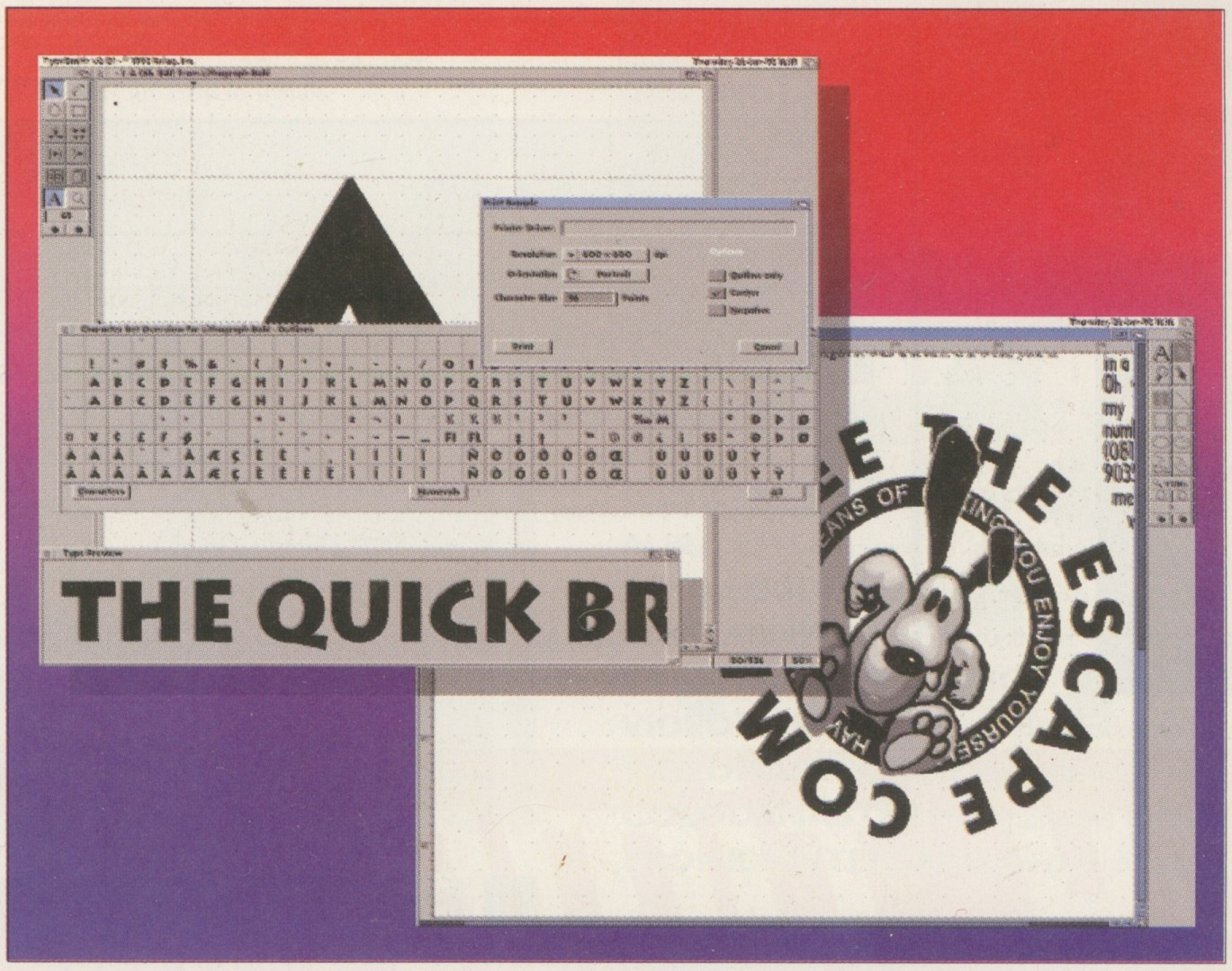
If the text is simple you can try to create booleaned text by using a variety of boxes on the page which are layered to chop out parts of the text, then replace those parts with different coloured bits and so on. Alternatively, you could use Art Expression to perform the same task, but you might have problems with Art Expression's output if you use ProPage.

Never mind. If you desperately want the effect, you'll work at it. If not, you can always come back to that effect when your software has been upgraded and has it built-in. My advice to you is not to try too hard to get an effect. It may seem odd to say that, but if you have a job to do and you spend four days just trying to do boolean text, you will neglect the rest of the job because of your mounting frustration. Trust me, I've been in the same situation.

Modulate your desires. Some of the nicest layout designs are also the simplest, the kind of thing you could bung out on a word processor. Also, you should work within the limitations of your output device. If you've only got a nine-pin dot matrix printer, don't bother with complex colour graphics – they will get lost on the page and, at best, come out muddy and unclear.

If you have to use this sort of printer, stick to line art and simple boxes, and paste up your pictures afterwards. When using a laser printer, always bear in mind that lasers don't usually print edge-to-edge on the page. Also, if you are going to use pictures or scanned images, what looks good on the screen doesn't always work on paper.

Well, that's ideas and designs briefly covered and I seem to have run out of room, so next month I'll be back with a few more of the hundred and one things I want to tell you about.





Just to prove how difficult it is to produce this sort of effect in an Amiga DTP package, I resorted to doing it in DPaint.



Quality images

The secret of success is to make sure that the image you print is of the highest quality you can achieve, because the printer is always going to downgrade that image. If you have ADPro and are using 8-bit greyscale or 24-bit colour images, don't reduce them to 16 colours, don't use dithering, and don't necessarily try to get them to fit your screen's aspect ratio.

Again, if you are using an image processing program for your pictures, use the gamma correction tool to brighten up your picture because printed output is always darker than screen output.

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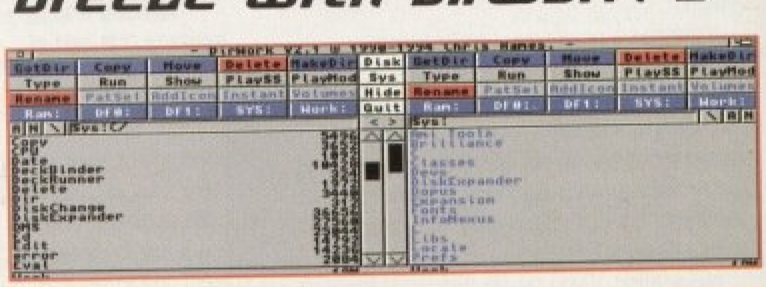
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